AMSTRAD | COMMODORE | SEGA | NINTENDO | ATARI | SINCLAIR | NEO-GEO | SONY | COIN-OP | MOBILE

retro GAMER Collection

The essential guide to classic videogames

256 PAGES OF CLASSIC RETRO GAMING

Imagine Publishing Ltd
Richmond House
33 Richmond Hill
Bournemouth
Dorset BH2 6EZ
☎ +44 (0) 1202 586200
Website: www.imagine-publishing.co.uk

Editor
Darran Jones

Editor in Chief
Rick Porter

Designed by
Danielle Dixon, Stephen Williams, Sarah Bellman

Contributors
Mike Bevan, Stuart Campbell, Martyn Carroll, David Crookes, Jonti Davies, Ashley Day, Craig Grannell, Stuart Hunt, Damien McFerran, Gabriel McGrath, Paul Rigby, Craig Ritchie, Jay Slater, Spanner Spencer

Proofed by
Olly Dean, Daniel Peel

Head of Design
Ross Andrews

Printed by
William Gibbons, 26 Planetary Road, Willenhall, West Midlands, WV13 3XT

Distributed in the UK & Eire by
Imagine Publishing Ltd, www.imagineshop.co.uk. Tel 01202 586200

Distributed in Australia by
Gordon & Gotch, Equinox Centre, 18 Rodborough Road, Frenchs Forest, NSW 2086. Tel + 61 2 9972 8800

Distributed in the Rest of the World by
Marketforce, Blue Fin Building, 110 Southwark Street, London, SE1 0SU.

Disclaimer
The publisher cannot accept responsibility for any unsolicited material lost or damaged in the post. All text and layout is the copyright of Imagine Publishing Ltd. Nothing in this bookazine may be reproduced in whole or part without the written permission of the publisher. All copyrights are recognised and used specifically for the purpose of criticism and review. Although the bookazine has endeavoured to ensure that all information is correct at time of print, prices and availability may change. This bookazine is fully independent and not affiliated in any way with the companies mentioned herein.

Retro Gamer Collection © 2010 Imagine Publishing Ltd

ISBN 978-1-906078-66-9

Welcome to the greatest retro gaming collection ever...

retro GAMER COLLECTION

Welcome again to another bookazine that's laden with classic retro gaming content. It's certainly been a while since Volume 3 appeared, but in that time **Retro Gamer** and retro gaming in general have gone from strength to strength. We've spoken to numerous leading experts within the field, tracked down developers behind some of the world's greatest games, and have even had the legendary John Romero guest edit an entire issue. Not bad going for a niche publication.

The following tome contains some of the finest work from issues 50-67 – and a few earlier due to requests – and is not only overloaded with fascinating and informative features, but is also guaranteed to send your nostalgia glands into overload. The videogame industry is changing at an alarming pace, so rather than try to keep up, why not simply indulge in some of its greatest moments? Everything from a complete history of Commodore's Amiga range to behind-the-scenes glimpses of both *Pac-Man* and *Space Invaders* is included, so there's never been a better time to get up to speed on gaming's rich and varied past.

Enjoy.

retro GAMER Collection

>> YOUR ESSENTIAL GAME ANTHOLOGY

CONTENTS

The ultimate guide to classic gaming

RETRO REVIVAL

6 Sonic the Hedgehog 2
40 Sky Skipper
98 Wanted: Monty Mole
144 Citadal
182 Retrograde
216 Black Tiger
252 Frostbite

THE MAKING OF

26 Pac-Man
60 Dandy
118 Resident Evil
146 Cannon Fodder
178 Battle Zone
218 Robotron: 2084
246 Space Invaders

THE HISTORY OF

8 Metroid
90 Castlevania
168 Shining Force
208 Mario Kart

DEVELOPER LOOKBACK

34 Shiny Part 1
52 Shiny Part 2
84 Microprose Part 1
130 Microprose Part 2

THE CLASSIC GAME

16 Baldur's Gate
58 Super Punch-Out!
124 Teenage Mutant Ninja Turtles: Turtles in Time
158 Planescape: Torment
176 Skool Daze
226 Quake II
244 Garou: Mark of the Wolves

RETROINSPECTION

18 Atari ST
66 Mega-CD
108 Game Boy
136 Amiga
184 Game & Watch
228 Intellivision

PERFECT TEN

22 Atari ST
72 Mega-CD
114 Game Boy
190 Game & Watch
232 Intellivision

AND THE REST...

24 Atari ST
74 Mega-CD
116 Game Boy
234 Intellivision

COMPANY PROFILE

100 Big Red Software
152 Level 9
200 The Bitmap Bros

EASTERN PROMISE

82 Salamander Deluxe
150 Shinrei Jujitsu Taroumaru

THE DEFINITIVE

42 Boulderdash
192 Arkanoid
236 Metal Slug

WHY YOU MUST PLAY

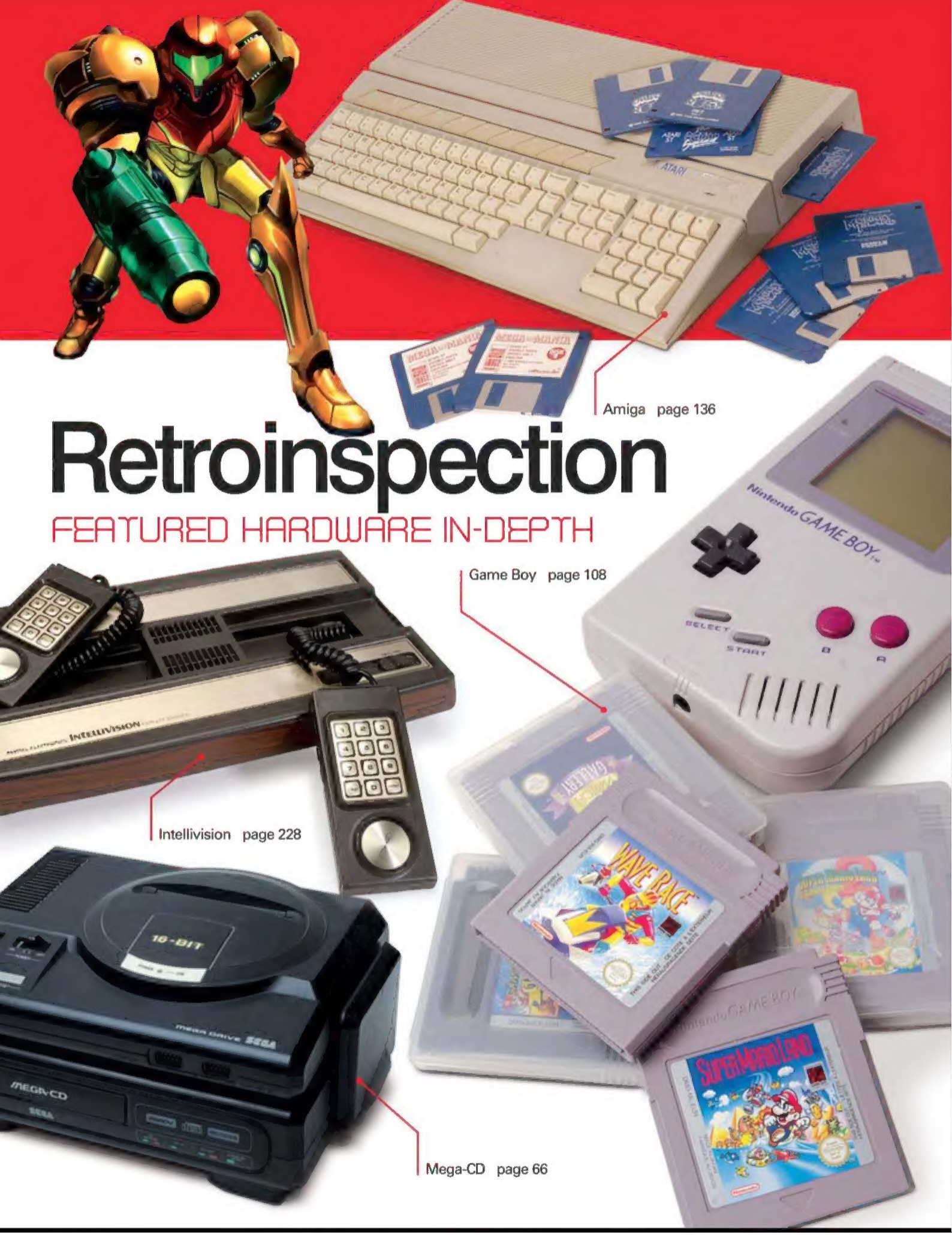
32 Rygar
64 Slap Fight
106 Mr Heli
166 Bonanza Bros
206 Rod Land

IN THE CHAIR

76 Hideo Kojima
126 Will Wright
222 Nolan Bushnell

THE BIG FEATURE

160 The Ultimate Adventure



Retroinspection

FEATURED HARDWARE IN-DEPTH

Amiga page 136

Game Boy page 108

Intellivision page 228

Mega-CD page 66

SONIC THE HEDGEHOG 2

THE BEST SONIC GAME OF ALL TIME? YOU BETCHA

- **PUBLISHER:** SEGA
- **RELEASED:** 1992
- **GENRE:** PLATFORMER
- **FEATURED HARDWARE:** MEGA DRIVE
- **EXPECT TO PAY:** £2+

HISTORY

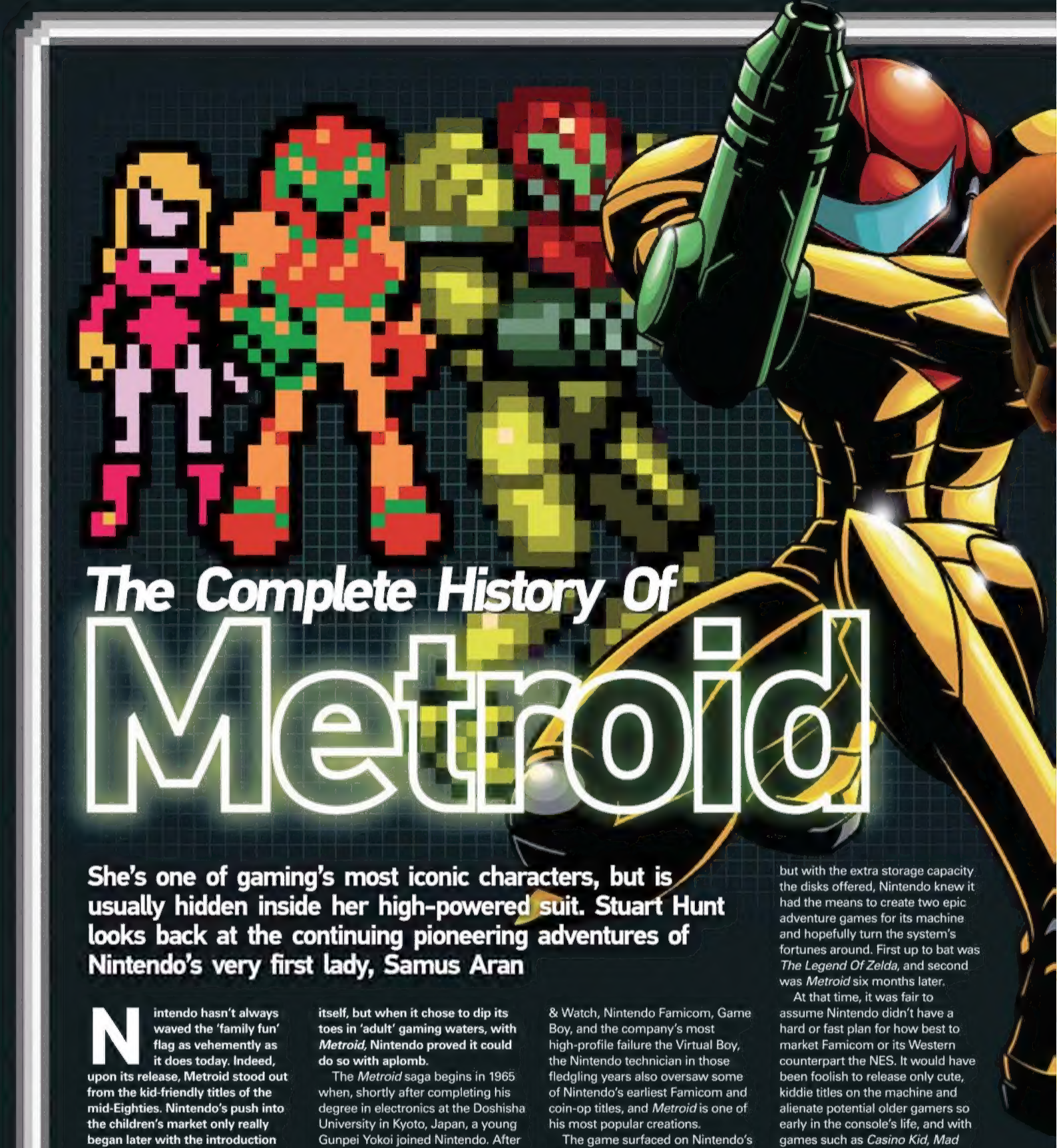
Lightning in a bottle. Every game developer wants it, and yet it's so hard for them to successfully contain it when they do have it within their grasp.

If Sonic's original outing was the proverbial bottled lightning then its sequel, released in 1992, was an all out thunderstorm that held a white gloved, two-fingered salute against the competition and proved that Sega's new mascot was definitely here to stay.

Realising that if it ain't broke there certainly isn't a real need to fix it, *Sonic The Hedgehog 2* (developed by both Sonic Team and Sega Technical Institute) is refreshingly free of the shackles that have plagued later games in the series and proves that the blue Erinaceus's real home will always be the 2D plains of old and not the 3D playgrounds that he's now constantly squeezed into.

Boasting 20 levels, a new spin boost for Sonic and an insane looking pseudo 3D bonus round that saw Sonic racing into the screen in search of rings, the greatest addition to the core gameplay was the addition of Miles 'Tails' Prower. A cute twin-tailed fox with the handy ability to fly after the speedy Sonic, Tails's arrival heralded the inclusion of a new two-player versus mode that enabled you and a mate to race through a stage as quickly as possible. Granted there were only four levels to choose from and the squashed sprites were a little off-putting but I've lost count of the number of hours I spent racing through Casino Night Zone and it still never gets tiring (although I'm nowhere near as good as I once used to be).

Boasting better level design, crisper visuals and some classy tunes, Sega's sequel is one of those rare examples of a follow-up that actually improves on its predecessor in every possible way. So dig it out of your Mega Drive collection, blow that fine level of dust off the casing and fall in love with this classic all over again.



The Complete History Of Metroid

She's one of gaming's most iconic characters, but is usually hidden inside her high-powered suit. Stuart Hunt looks back at the continuing pioneering adventures of Nintendo's very first lady, Samus Aran

Nintendo hasn't always waved the 'family fun' flag as vehemently as it does today. Indeed, upon its release, Metroid stood out from the kid-friendly titles of the mid-Eighties. Nintendo's push into the children's market only really began later with the introduction of the Super Nintendo, which we suspect had a lot to do with the fact that Sega was grooming the Mega Drive to appeal more to adult gamers. In varying capacities and over several console wars, Nintendo clearly strove to uphold the family-based image it had carved for itself, but when it chose to dip its toes in 'adult' gaming waters, with *Metroid*, Nintendo proved it could do so with aplomb.

The *Metroid* saga begins in 1965 when, shortly after completing his degree in electronics at the Doshisha University in Kyoto, Japan, a young Gunpei Yokoi joined Nintendo. After a period dabbling with playing cards and electronic toys, Nintendo set its sights on the coin-op market and made Yokoi instrumental in spearheading that transition. While his name became synonymous with Nintendo's most successful hardware creations, including Game & Watch, Nintendo Famicom, Game Boy, and the company's most high-profile failure the Virtual Boy, the Nintendo technician in those fledgling years also oversaw some of Nintendo's earliest Famicom and coin-op titles, and *Metroid* is one of his most popular creations.

The game surfaced on Nintendo's Japan-only Famicom Disk System on 6 August 1986. The external disk drive that connected to the machine's cartridge slot ran off three-inch floppy diskettes. At the time of *Metroid*'s release, the new-fangled add-on was struggling to strike a chord with Famicom owners, but with the extra storage capacity the disks offered, Nintendo knew it had the means to create two epic adventure games for its machine and hopefully turn the system's fortunes around. First up to bat was *The Legend Of Zelda*, and second was *Metroid* six months later.

At that time, it was fair to assume Nintendo didn't have a hard or fast plan for how best to market Famicom or its Western counterpart the NES. It would have been foolish to release only cute, kiddie titles on the machine and alienate potential older gamers so early in the console's life, and with games such as *Casino Kid*, *Mad Max*, *Friday The 13th*, *Nightmare On Elm Street* and *Sweet Home* appearing on the system, Nintendo fully understood this. Only with retrospect can we appreciate *Metroid* as a unique Nintendo game. Still, in terms of gameplay and design it was trailblazing, ambitious,

Leading Ladies

Samus may have been the first strong lead female character in a videogame, but she certainly wasn't the last. Just check out these memorable leading ladies. Easy, gents...

JOANNA DARK
FIRST APPEARED IN: PERFECT DARK

Rare's spiritual successor to its hit smash *GoldenEye* upped the ante in every department. Aside from tweaking the game engine and refining the multiplayer, Rare also ditched one special agent for another. Bond became a distant memory as feisty brunette – later turned redhead – Joanna Dark squeezed into a tiny cat suit and became a pin-up for N64 owners the world over.

TYRIS FLARE
FIRST APPEARED IN: GOLDEN AXE

Tyris Flare makes up the party of three characters in Sega's swords-and-spells beat-'em-up *Golden Axe*. She takes the form of an Amazonian woman in a red-and-silver bikini who wields a sword. Her look seems to be based on Briggite Nielsen's character Red Sonja in the film of the same name. Like Samus, Tyris is also an orphan looking to exact revenge on her parents' killers.

LARA CROFT
FIRST APPEARED IN: TOMB RAIDER

When Lara swung onto our screens in 1996, the reaction was unprecedented. The genesis of the 3D platform adventure game was one thing, but a frisky camera paired with a tomb-raiding socialite with triangular boobs was something else altogether.

PRINCESS PEACH
FIRST APPEARED IN: SUPER MARIO BROS

Peach (aka Princess Toadstool) is the perpetual kidnap victim in the *Super Mario Bros* series. While that might not read like the characteristic of a strong female character, over the years, in appearances like *Super Mario Bros 2*, the *Mario Kart* franchise, and *Super Princess Peach* (in which the tables are turned and she has to save the plumbers), she became quite the heroine.

ALYX VANCE
FIRST APPEARED IN: HALF-LIFE 2

The witty, pretty, resourceful and intelligent Alyx Vance sits high on our list of great female videogame characters. Very much the girl-next-door type, she helps us out of a few scrapes yet also shows us the gentle and fragile side of her character. The only drawback is DOG, her robotic bodyguard capable of ripping the guts from a Stalker quicker than Gordon Freeman can work out the principal square root of nine.

SONYA BLADE
FIRST APPEARED IN: MORTAL KOMBAT

Sonya Blade isn't the sexiest-looking female character ever designed. In fact, she kind of looks like she's just stepped out of the gym and is about to buy a Frappuccino from the nearest Starbucks. However, as a member of the US Special Forces and with lips that can kill, she's not someone you really want to mess with.

CHUN-LI
FIRST APPEARED IN: STREET FIGHTER II: THE WORLD WARRIOR

Basically, there's not a man under the age of 30 who doesn't know the command for a Spinning Star Kick. The leggy Chun-Li was the original 16-bit videogame pin-up and a firm favourite among both male and female beat-'em-up fans. Working for Interpol, she's on the case to bring down the crime syndicate responsible for murdering her father. Can anyone see a pattern emerging?

JILL VALENTINE
FIRST APPEARED IN: RESIDENT EVIL

The STARS operative with big pockets and a firearm from the outset became the first choice for many gamers on their first *Resident Evil* playthrough. You see, Capcom ingeniously made the difficulty of the game representative of its two central characters – the female Jill making the mission slightly easier. She's since become one of the series' most popular characters.

"In terms of story, Metroid is far darker than any other Nintendo series"

» Yoshio has been behind nearly all of the *Metroid* titles, and speaks to us this issue about the making of *Super Metroid* on page 58.

and, like its floppy stable-mate *Zelda*, offered console owners the then-unprecedented opportunity to explore the wonders of open-world environments.

Perhaps the reason *Metroid* shares none of the chirpiness so piquant in later Nintendo titles is that Shigeru Miyamoto, the brainchild behind much of Nintendo's more childlike characters – including Donkey Kong, Mario and Yoshi – had no involvement in its creation. Arguably, his only contribution to the original *Metroid* was the hiring of designer Yoshio Sakamoto, who worked alongside Yokoi as director of the game. That, and Miyamoto's signature design style of course. It's rumoured Sakamoto was looking to make a name for himself at Nintendo and felt the best way to do so was to create games that were unique and atypical of those being made by Miyamoto and his team Entertainment Analysis and Development (EAD). So, with the help of Yokoi, composer Hirokazu 'Hip' Tanaka, character and scenario designer Makoto Kanoh, and Hiroji Kiyotake, who is credited with designing Samus Aran, Sakamoto set about making a game in strong contrast to Miyamoto's style.

When breaking down *Metroid*'s theme, it's clear from where the game drew inspiration. As fans know, Ridley Scott's sci-fi classic *Alien* played a big part in the look and style of *Metroid*. The game's grotesque alien designs look amazingly similar to HR Giger's classic creatures, and the levels share the bleak isolated appearance of the film sets. Moreover, the game's protagonist, Samus Aran, is a strong female central lead, much like Sigourney Weaver's character, Ripley, in the film. The revelation that Samus was female shocked fans in 1986. Placed in context, however, it was a first for a home videogame series, and a revelation that was only revealed if the player escaped the self-destruct sequence within a strict time limit following the final confrontation with Mother Brain. The game even throws up a red herring by referring to Samus as a he in the game manual, although discrepancies between

videogames and their instruction manuals are commonplace, so little can be read into that. As you can imagine, few people discovered the gender bender, only learning the truth five years later with the release of *Metroid II* on Game Boy.

Given its *Alien*-inspired story and look, *Metroid* became a huge hit in the West despite the US cartridge version being slightly inferior to its Eastern counterpart. Whereas the disk version featured an internal save game function enabling fans to effortlessly save their progress, Nintendo decided not to include a battery in the US cartridges and so the poor gamers in America and Europe were left to use an archaic password system instead. However, as fans quickly discovered, despite the initial inconvenience of fumbling with pen and password, the save system actually brought with it its own benefits and led to one of the most famous videogame cheats of all time. When inputted, the fabled 'Justin Bailey' password code enabled players to start the game with an entirely different-looking Samus: de-suited and complete with moss-green hair (though the games depict her as a blonde), a bright pink leotard and armed to the back teeth with power ups. However, as the internal makeup between the Famicom and NES differ slightly – NES being the lesser of the two machines, with fewer peripherals, region lockout and substandard sound output – Tanaka's wonderful atmospheric score suffered slightly in the US translation.

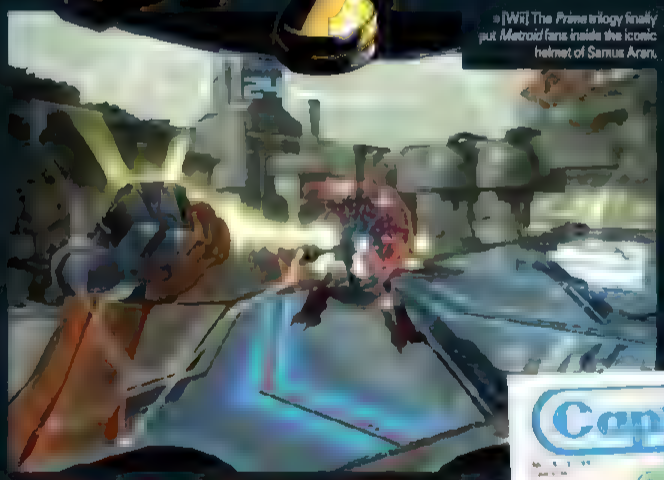
In terms of story, *Metroid* is far darker than any other Nintendo series. *Metroid* follows the tale of an orphaned bounty hunter known as Samus Aran, who, throughout most of the games, is concealed inside red-and-gold armour known as the Power Suit. In her first appearance in the original Famicom title, her skinny limbs, large spaceship-like head and ability to roll into a ball almost gave her the look and feel of a robotic bipedal insect – light years away from the pretty young woman hidden within. In later games we discover that the suit is the creation of a peaceful bird-like alien species called the Chozo who helped raise Samus after her parents were killed by pterodactyl creature, and leader of the space pirates, Ridley. Now a bounty hunter, Samus has devoted her life to the enslaving of space pirates and the destruction of the energy-sapping parasites known as Metroids.

While *Metroid* feels a little primitive by today's standards, when returning to the game you'll recognise the strong formula for which the series is now renowned. A template of multi-faceted gunplay, wonderful adventure and platforming gameplay, and a gripping narrative have helped the series endure for over 20 years and gain a passionate legion of Nintendo fans. And that's not all: the *Metroid* gameplay has since gone on to inspire the direction of many other popular videogame franchises – most notably *Castlevania*. The classic 1997 PlayStation title *Castlevania: Symphony Of The Night* spawned the portmanteau 'Metroidvania' as an umbrella term for all the *Castlevania* titles that adhere to *Metroid*-style gameplay.

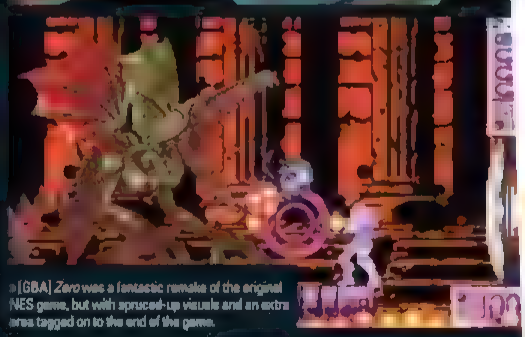
Fans had all but forgotten *Metroid* by the time Nintendo finally released a Game Boy sequel five years later. And although *Metroid II: Return Of Samus* did garner numerous plaudits and critical acclaim, the public seemed less enamoured with Samus's portable outing.

As well as appearing on a new console, *Metroid II* was also developed by a new dev team: Hiroyuki Kimura and original character designer Hiroji Kiyotake both took to the director's chair. It's rumoured that at this time Yoshio Sakamoto chose to take a back seat from the series while he focused his attention on bringing together the right team and story for Samus's Super Nintendo debut.

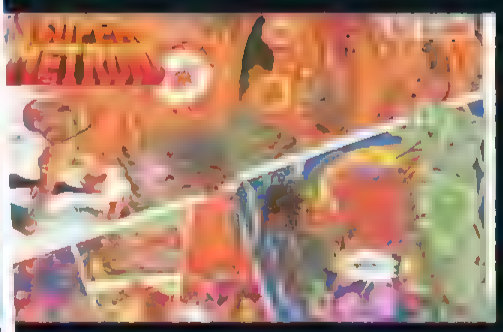
But back to *Metroid II*. The story this time centres on Samus travelling to the Metroid home planet SR-388 to defeat the Metroid Queen. In terms of gameplay – probably in order to suit the attributes and technical limitations of Game Boy – *Metroid II* is far more linear, which many fans found difficult to accept. The game features hardly any exploration, Samus's goal being to simply hunt and eradicate a preset number of Metroids in order to progress. Augmenting the game's emphasis on action, Samus herself is bestowed with a bevy of new weaponry, and, when in her 'ball' state, gains wall-crawling abilities. Also, to compensate for Game Boy's black-and-white display, the Samus Varia Suit was also rethought slightly. At certain points during the game, Samus needs to switch between two different suits, so her Varia Suit had to be made distinguishable by design and not colour. This explains the



» [Wii] The *Prime* trilogy finally put *Metroid* fans inside the iconic helmet of Samus Aran.



» [GBA] *Zero* was a fantastic remake of the original NES game, but with spruced-up visuals and an extra area tagged on to the end of the game.



[Wii] The attention to detail in *Corruption* is staggering, check out the visor.

[Game Boy] *Metroid II: Return Of Samus*, is the first portable *Metroid* game and the only one lacking Sakamoto's involvement.

oversized shoulders, a now-iconic look for the suit and Samus herself, following the popularity of the *Prime* trilogy. The monochrome issue is also why Samus's arm cannon changes shape whenever she switches between its various fire functions.

Although it wasn't as commercially successful as Nintendo had hoped, and despite its linear approach to gameplay, *Metroid II* is now considered by fans as a great handheld debut for the franchise, and a tasty appetiser to what many would consider the pinnacle of the series: the aptly titled *Super Metroid*.

Released for SNES in 1994, *Super Metroid* proved another hit for Nintendo and its new 16-bit machine. With the directorial reins handed back over to Sakamoto, and the fantastic story that delves a little more into Samus's tragic past, not to mention the impressive grunt of the new console, meant the stage was set for a return to form for the series. Following on directly from the events of *Metroid II*, *Super Metroid* followed Samus's mission to hunt down her arch-nemesis Ridley, who has fled the newly rebuilt planet Zebes with the last remaining Metroid. *Super Metroid*'s gameplay recalled the labyrinthine caverns and open-world gameplay of the original, only decorated with lavish colour palettes, detailed sprite work, and some extremely smooth SNES animation.

Once again the series placed its emphasis on exploration, only this time inside screens teeming with secrets and hidden rooms to explore. And like *Metroid II*, far more consideration was given over to Samus's weapons and suit abilities through various upgrades, which not only played a part of the gunplay, but also in the puzzle solving. And to round everything off nicely, Nintendo also introduced a roster of memorable villains for Samus to face as well as a return for the screen-smothering Mother Brain and Ridley.

Featuring on the box art, Ridley is a character Sakamoto was hoping *Metroid* fans would most embrace, pulling out all the stops to make him integral to the story. At the start of the game, Samus arrives on Zebes, where she discovers Ridley has broken into the research facility, killed all the scientists, and stolen the last remaining Metroid, which, at the finale of *Metroid II*, she decided to save and mother – yet more *Alien* plot similarities. When Samus finally confronts Ridley at the base, after a quick fight he flees the facility with the Metroid in tow, leaving Samus mere minutes to escape before the entire place explodes. It's an epic and memorable lead into the game and remains an iconic SNES moment.

With an estimated 2 million copies sold worldwide, *Super Metroid* was unlike anything else on SNES, and with Nintendo riding high on a wave of success after the likes of *Super Mario World*, *F-Zero*, *Pilotwings* and *A Link To The Past*, SNES owners were eagerly waiting to snap up the next title to come charging from the publisher's stable. Looking like no other Nintendo game of its time, served the game well as it stood out from the crowd, and when the positive magazine reviews started flooding in and word spread of its brilliance, the series' popularity skyrocketed. But once again *Metroid* fans were forced to wait patiently before Samus resurfaced.

It still amazes many fans that *Metroid* never got a Nintendo 64

> **"Sakamoto felt the best way to [make a name for himself] was to create games that were unique"**

release. After all, *Mario*, *Star Fox*, and even *Pilotwings* enjoyed 64-bit sequels, so why not *Metroid*? Perhaps the reasons lie with the hazy internal goings-on at Nintendo at the time. Following the commercial failure of Virtual Boy, Gunpei Yokoi resigned from Nintendo and started up his own company, Koto Laboratory, before his tragic death in a road accident in 1997. With no leader at the helm of R&D1, it's possible the *Metroid* series was put on a long hiatus while Miyamoto and Nintendo focused on their new console and also decided what to do with the *Metroid* franchise. Supporting this idea is Nintendo's decision to hand the series over to American developer Retro Studios, a brave move that could have proved devastating for *Metroid*.

Fans were concerned upon hearing that *Metroid* was going 3D, skipping a console war, and being handled by an external studio in the US. However, their fears were allayed when they learned that Sakamoto would be joined by Miyamoto in what marked his first direct involvement in the series. Despite being a colossal eight years in the making, the eventual game that came from this partnership was another glorious high for the series. Although it shirked numerous deadlines and was rumoured to have had a catalogue of issues during development, *Metroid Prime*, released for GameCube in 2002, was a perfect 3D debut for the franchise.

Metroid Prime marks a significant change in the series. Not only is the game 3D, but it's also played from a first-person perspective. Interestingly, it's widely reported that the first-person shooter idea was suggested by Miyamoto himself. Disappointed with Retro Studios' efforts and the game's camera, he apparently ordered the developer to rethink the game, suggesting the action be played through the eyes of Samus herself and that the various suits be represented by coloured visors. The first-person shooter approach meant the attention to detail of the helmet's HUD had to be astonishing, and to Retro Studios' credit they did a great job of making you feel like you're actually inside Samus's Power Suit – even when she did her ball-morphing routine and the game switched to third person.

Prime, it seemed, had everything covered. And yet despite the bold change in perspective and the jaw-dropping visuals, what really made *Prime* so impressive was just how well the open-world gameplay of *Metroid* and *Super Metroid* had been carried across to 3D and the FPS genre. Such freedom was practically unheard of in the genre, in console games at least. Players could finally immerse themselves in the freakish world of *Metroid*, get inside the head of their heroine and get up close and personal with the game's monsters. *Prime* was well received by both the gaming press and *Metroid* fans in its day. In a time of less-than-perfect Nintendo titles, such as *Super Mario Sunshine*, *Star Fox Adventures* and *Mario Kart Double Dash!!*, *Prime* stood out as the best GameCube game from Nintendo. And for a period, in the West at least, it was Nintendo's most important title.

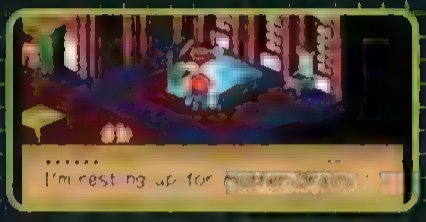
Given that the series was hitting the height of its popularity in 2002, it should come as no surprise that *Metroid* saw no less than five more games appear on various Nintendo consoles within the following four years. The first of these was *Metroid Fusion*, which was actually released the same year as *Prime*. While *Metroid* director Yoshio Sakamoto helped guide Retro Studios during

Hunter for Hire

Over the years, Samus hasn't just appeared in Metroid games. Oh no – her face has graced a number of titles, and not just in Nintendo games. Here are a few of our favourites...

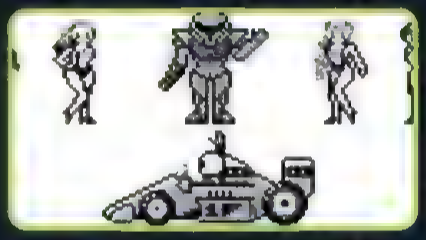
SUPER SMASH BROS

Samus has appeared in all three of the *Super Smash Bros* games. In *Super Smash Bros Brawl*, however, she can appear in six alternative suits, including her Zero Suit form, where she ditched the tacky pink leotard for a fetching blue jumpsuit.



SUPER MARIO RPG

In *Super Mario RPG*, Samus can be seen tucked up in bed inside Mushroom Kingdom's guest room, wearing her suit, which we find a little weird. Anyway, when Mario attempts to talk to her, she replies, "I'm resting up for Mother Brain".



F1 RACE

This early Game Boy racer features cameos from a whole host of Nintendo superstars. When you win a race, the game flashes up with a celebration screen showing either Mario, Peach, Bowser, Zelda, Toad or Samus waving at you, which is jolly nice of them.

NINTENDO TETRIS

In *Tetris* for NES, another team of Nintendo characters show up to congratulate you – this time for your block-stacking ability. It's a weird image: Mario looks miffed, Link looks like a gnome, DK's wearing a cravat, and Samus is playing a cello.

[SNES] Samus confronts her arch-nemesis Ridley in *Super Metroid*.

[NES] The famous 'Justin Bailey' cheat unlocks a new Samus, levelled up and with green hair.

Suits you... er, madam

ZERO SUIT

The Zero Suit is the blue jumpsuit Samus wears beneath her Power Suit. Fans first got to see the costume in *Metroid: Zero Mission* on GBA after successfully releasing Mother Brain. The game then continues with a de-suited Samus. In her Zero Suit, she is obviously more agile but much less guarded against attacks.

POWER SUIT

The Power Suit is Samus's standard upgradeable suit and is the one she starts out with in the first *Metroid* game. The suit is said to have been created by the Chozo, a bird-like alien race that helped raise Samus following her parents' death at the hands of the nefarious space pirate leader Ridley.

VARIA SUIT

Making its first appearance in *Metroid* where it changed the Power Suit to a purplish colour, and changing shape in *Metroid II: Return Of Samus* – it has large shoulder pads – the Varia suit offers Samus far better protection from enemy attacks and extreme environmental conditions. Following *Prime*, it is now her most iconic garb.

PHAZON SUIT

An upgrade for the Power Suit found in *Metroid Prime*, the Phazon Suit consists of a radioactive substance that smothers Samus's outfit. The Phazon Suit offers additional protection against damage and also makes Samus immune from the radiation given off by certain strains of Phazon.

GRAVITY SUIT

Another upgrade for the Power Suit is the Gravity Suit. As its name quite rightly suggests, this armour offers Samus enhanced agility – even in water. The Gravity Suit also brings with it the benefit of slightly more protection than the Varia Suit. This outfit's first appearance was in *Super Metroid*.

DARK SUIT

The Dark Suit made its debut in *Metroid Prime 2: Echoes* and is the first suit upgrade that Samus acquires in the game. The Dark Suit's chief property is that it lessens the damage taken by the health-depleting Dark Vapours of Dark Aether's atmosphere. A very handy item to have in your wardrobe.

LIGHT SUIT

As you can see, the Light Suit has a much sleeker appearance than the others. Not only does it allow Samus to pass safely through storms of Ing particles in *Metroid Prime 2: Echoes*, but it also enables her to travel on Light Shafts to quickly move around the different areas of the game.

PED SUIT

Following the events of *Prime*, the Phazon Enhancement Device (PED) Suit was built especially for Samus so that she could safely harness and use the radioactive substance Phazon. In the game, the PED Suit allows her to go into a "hyper mode" but at the cost of a slab of energy.

FUSION SUIT

The Fusion Suit is the bizarre result of Samus being forced to bond with a Metroid in order to save her life after she contracted an X Parasite infection. The Fusion Suit is actually notably weaker than the Power Suit, but it does allow Samus to climb walls and pull herself up onto ledges.

the development of *Metroid*'s first three-dimensional outing, he had also longed to create a true follow-up to his magnum opus *Super Metroid*. Of course, he was keen to continue the story in two dimensions, which left him no option but to develop the sequel, titled *Metroid Fusion* (aka *Metroid IV*) for Nintendo's then-newest handheld Game Boy Advance. *Fusion* may have been the creation of *Metroid* stalwart Sakamoto, but the gameplay is more akin to the style and gameplay of *Metroid II*. In fact, the game is probably even more accessible and more linear due to the fact that Samus is joined by a computer aide called Adam – said to be a robotic replicant of Samus's old commanding officer – and progression is mission based, which nullifies any sense of exploration.

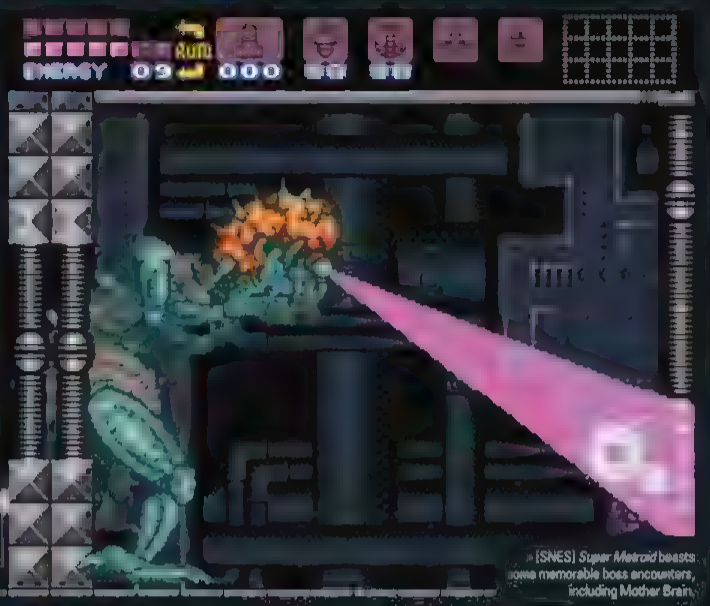
The story details how Samus is forced to fuse with the Metroid she's been fostering after returning to SR-388 and becoming infected by a deadly parasite. The result of this fusion gives Samus all-new Metroid abilities and a new underpowered suit: the Fusion Suit, which is less powerful than the standard Power Suit but does offer added agility. Presently, *Fusion* is the final *Metroid* game in terms of story chronology. However, in 2005 a DS sequel, titled *Metroid Dread*, was said to be in the works, but more on that later.

Two more *Metroid* titles were released in 2004. The first, *Metroid Zero Mission*, landed on GBA in February and marked a couple of firsts for the series. In keeping with the 2D Game Boy Advance titles, Sakamoto was in the driving seat once again, but this looked set to bring the original NES game right up to date with the graphical finesse of *Super Metroid* and *Metroid Fusion*. *Zero Mission* is a fantastic remake of the original NES game that makes wonderful use of all the extra power inside its new host console. It also has one rather special ace up its sleeve for fans: once Samus defeats Mother Brain, the game continues to reveal an extra section that allows the player to control Samus in her Zero Suit, which is basically just a blue jumpsuit.

Following the release of *Metroid: Zero Mission*, attention returned to the GameCube after Retro Studios released its three-dimensional follow-up to *Prime* the following November. *Metroid Prime 2: Echoes* was another excellent title only really let down by its disappointing multiplayer deathmatch section. Apart from that, the gameplay remained pretty much untouched from *Prime*. Retro Studios added some new enemies – most notably Dark Samus – two new Power Suits (Dark and Light), and a unique dark and light element to the gameplay courtesy of the new setting, planet Aether.

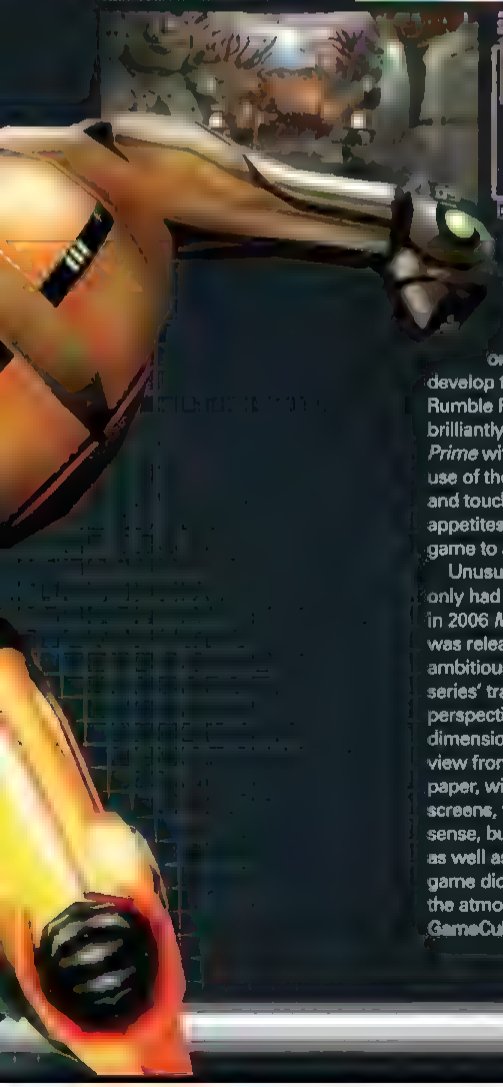
Echoes retained the same level of quality of *Prime*, but sadly failed to garner the same level of sales at retail. And being released shortly after the launch of *Halo 2* certainly didn't help. Following the release of *Echoes* was a bizarre but brilliant *Metroid*-themed pinball title for DS. The game is said to have come about after Kensuke Tanabe felt Samus's ability to morph

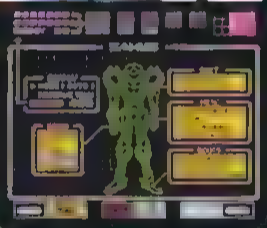
» [Wii] Samus made appearances in all three *Smash Bros* games, a sign of how much love Nintendo has for the character.



» [SNES] *Super Metroid* boasts some memorable boss encounters, including Mother Brain.

"We're convinced Nintendo's most un-Nintendo series will continue to live up to its legacy"





into a ball would lend itself to a pinball spin-off. He approached UK developer Fuse Games, who worked on *Mario Pinball Land*, to develop the idea. Packed with the DS Rumble Pak, *Metroid Prime Pinball* brilliantly fuses the world of *Metroid Prime* with pinball. It also makes great use of the handheld's dual screens and touch-sensitive abilities, whetting appetites for the first 'proper' *Metroid* game to appear on the system.

Unusually for *Metroid*, DS fans only had to wait a year because in 2006 *Metroid Prime Hunters* was released. Nintendo and Retro ambitiously dropped the handheld series' traditional 2D side-scrolling perspective in favour of the three-dimensional first-person shooter view from *Prime* and *Echoes*. On paper, with the DS stylus and dual screens, the new direction made sense, but in practice it didn't work as well as fans had hoped. While the game did a great job of squeezing the atmosphere and gameplay of the GameCube titles into the humble DS, the problems resided in the game's fiddly controls, which required a combination of both the D-pad and stylus to move Samus. To the game's credit it does improve on *Echoes'* lacklustre multiplayer section, and, control issues aside, it's still an enjoyable *Metroid* outing.

The final game in the saga, *Metroid Prime 3: Corruption*, was released on the Wii in 2007 and represents the conclusion of the *Prime* trilogy, continuing six months after the events of *Echoes*. Taking its cues from *Metroid Fusion*, Samus is again infected by a deadly substance – this time the radioactive matter known as Phazon – and is now fighting to save her own life while also trying to stop the Phazon threat from spreading to other planets. Unlike *Hunters*, it doesn't suffer in the handling department, with many fans saying it has the best controls out of all three games. Like the other *Prime* games, *Corruption* adheres to the open-world *Metroid* formula and serves as a fitting end to what can only be considered one of the best videogame series of all time.

The only other *Metroid* title we should pay tribute to is the still-unconfirmed and rumoured-to-be-in-development DS follow-up to *Fusion; Metroid Dread*. This portable title has been spinning around in the rumour mill since 2005, back when Game Informer announced Nintendo's Intelligence Systems was working on a new 2D *Metroid* game for DS. There is still no word from Nintendo whether or not the game is in development, but in 2007 interest was reignited when IGN discovered a telling message hidden in *Metroid Prime 3* that read "Experiment status report update: *Metroid* project 'Dread' is nearing the final stages of completion." But two years on we're still waiting for the game to appear.

The latest edition to the *Metroid* franchise is the exciting *Metroid: Other M*, a collaboration with Team Ninja that is due to arrive on the Wii in the Summer of 2010. In addition to featuring excellent looking combat that has elements of Team Ninja's *Ninja Gaiden* series in it, *Metroid: Other M* also enables you to switch to the traditional *Metroid Prime* first-person perspective.

The Metroid series has gone through many changes since its NES debut, and while the idea of a talking Samus feels strange, we've every confidence that Nintendo and Team Ninja will be able to once again work their magic and produce another stunning *Metroid* adventure.

Baldur's Gate

***Baldur's Gate* stands as a true landmark in RPG history. The result of the combined brilliance of BioWare and Black Isle Studios, it not only brought the *Forgotten Realms* to life like never before, but did so through the greatest implementation of the Dungeons & Dragons rule set ever seen in a computer game: the legendary Infinity engine.**

Following in the footsteps of its spiritual predecessor *Fallout*, *Baldur's Gate* solidified the revival of what was at the time a very stagnant genre. This outstanding fantasy epic won six Game Of The Year and 12 Role-Playing Game Of The Year awards in 1998 and went on to spawn a superb expansion pack, an absolutely brilliant sequel, and the highly praised *Icewind Dale* spin-off series. Now, as if you needed more convincing, Craig Ritchie shows us why *Baldur's Gate* is the Classic Game

Paladin

These proud warriors are the paradigm of all that is virtuous and good in the *Dungeons & Dragons* universe. Having lived such pious and noble lives, their chosen deity has bestowed upon them the blessings of a healing touch and divine protection from evil. It's fair to say that they probably wouldn't be the most fun at parties, though.

Mage

What would a high fantasy tale be without the essential wizards, wands, witches and warlocks? A normal story, that's what. So, of course, any Dungeons & Dragons party worth its salt has within its ranks one of these revered practitioners of the arcane arts. Get on the end of one of their magic missiles or fireballs and you'll certainly know it.

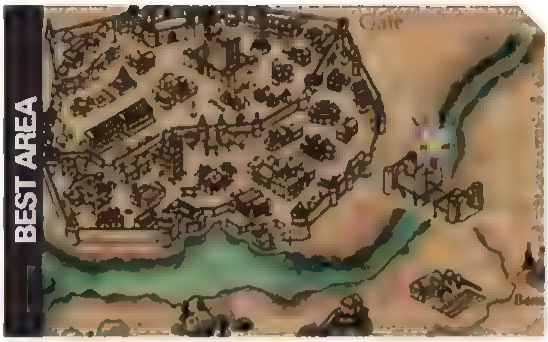
Cleric

As everyone knows, defeating crazed wizards and smiting evil all day long can be a rather dangerous job. With the NHS no longer providing health-care services to the Sword Coast area, clerics have become ever more sought after. Nowadays, even evil Drow elves such as Viconia here have little trouble finding work.

Thief

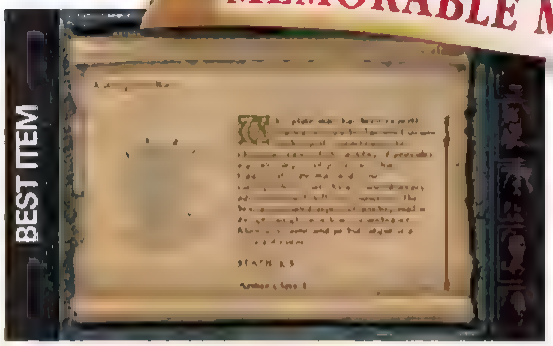
The word 'thief' often carries with it negative connotations and is usually associated only with petty stealing. This paints an exceptionally unfair picture of these fine, upstanding members of society: they are also very adept at picking locks, setting and disarming traps, and moving about without being noticed. Also, stabbing people in the back.

MEMORABLE MOMENTS



Could it be anywhere else?

Once you have uncovered the mysteries of the Cloakwood Mines, you finally find yourself able to enter the sprawling city of Baldur's Gate, home to Duke Eltan, the Flaming Fist, the powerful Merchant's League, and much more. Yet, despite four chapters having passed, you still have a long way to go. A slew of NPCs with a wide variety of sub-quests, numerous unique shops and an intricately crafted plot all combine to make this an engrossing and highly memorable part of your journey. And, as you soon find out, Baldur's Gate's greatest secrets lie not with its citizens, but are to be found far, far below the city streets.



Hand-crafted perfection

Choosing just one item out of the multitude on offer in *Baldur's Gate* was no easy task, but we eventually decided on this little beauty. After slaying an Ankheg, one of those bothersome subterranean arthropods from the Sword Coast, you can take its shell to the Thunderhammer Smithy in Beregost. There, the blacksmith Taerom will fashion it into extremely hardy plate armour for 4,000 gold pieces. It takes him ten days to make it – but we reckon that's cos he's using the down payment to get pissed out of his skull for a week, spending two days recovering from the hangover and then banging the armour together the night before.

Is Drizzt your real name?

Making full use of the licence, BioWare drew upon the existing *Forgotten Realms* canon and included a few cameo appearances by legends from the novels and pen-and-paper campaigns. While travelling south of Candlekeep, the party stumbles upon one of the most famous characters from the background literature, Drizzt Do'Urden. The lone-wandering Drow elf has come under attack from a band of gnolls and asks for your help in the battle. In an example of good role-playing freedom, the player can then fight alongside Drizzt or attack him and take his enchanted scimitars – two of the most powerful weapons in the game.

Sarevok, of course

A huge, evil warrior who is in fact a child of Bhaal, the dead Lord of Murder, Sarevok is responsible for much of the ills facing the Sword Coast. He's to blame for Gorion's death, is behind the tainted ore causing the iron shortage, and has ties with the ever-growing bandit problem facing the region. Sarevok is a tough opponent that the player has to face more than once during their quest, his incredible swordsmanship aided by his being impervious to magical attacks. What's more, Sarevok has his own sinister reason for hunting down your character – but we won't give this away in case you haven't played the game yourself.

Expansive stuff

Given the success of the title and the expandable design of the underlying Infinity engine, *Tales Of The Sword Coast* was inevitable. While not adding to the overall Bhaal storyline, it did add new quest areas, with Durlag's Tower being the main attraction. Skeletons, basilisks and battle horrors are only the start of the foes you have to vanquish as you venture further into the brilliantly crafted levels of the tower. While initially on the hunt for a dwarf's lost Soultaker dagger, the player can also pick up numerous sub-quests, making the whole experience of Durlag's Tower a rich and fulfilling extension of the main plot.

More than meets the eye

An old man in red robes approaches you from time to time, asking probing questions and occasionally guiding you on your way. He seems suspiciously interested in you and your now-deceased guardian Gorion. As it turns out, this elderly fellow is the legendary Elminster, Sage of Shadowdale. Popularised in the *Forgotten Realms* novels, Elminster could be regarded as the official D&D homage to Gandalf – a wise, well travelled and weathered old mage whose unassuming demeanour belies the vast power he yields. Having Elminster himself pointing you along in your journey meant that you were a part of something epic indeed.

What the mags said... ages ago

Games First 5/5

"What *Half-Life* was to 3D shooters, *Baldur's Gate* looks to be for RPGs – a game that takes a genre to the next level."

Gamespot 9.2/10

"Not only is *Baldur's Gate* easily the best computer adaptation of AD&D ever, it also convincingly returns role-playing games to the forefront of computer gaming."

What we think

There can be no doubt – *Baldur's Gate* is a true classic. While it may have since been surpassed by its superior sequel, the original paved the way for the computer role-playing landscape we enjoy today. A must-play if you haven't before, and a great title to revisit if you have.

IN THE KNOW

PLATFORM: PC
DEVELOPER: BIOWARE
PUBLISHER: INTERPLAY
RELEASED: 1998
GENRE: RPG
EXPECT TO PAY: A FEW QUID

ATARI ST

IT WAS THE MACHINE THAT SINGLE-HANDEDLY REVIVED THE FORTUNES OF AN INDUSTRY VETERAN. DAMIEN MCFERRAN SPEAKS TO THE MAN RESPONSIBLE FOR MASTERMINDING THE GREATEST COMEBACK SINCE LAZARUS

Following the videogame crash of the early-Eighties, Atari was in horrifying shape. The company's failure to successfully build on the triumph of its popular 2600 console (a machine languishing in obsolescence by this point), coupled with a generally poor quality of software available had triggered a catastrophic meltdown that very nearly destroyed the entire videogame industry. After the dust had settled, Atari's parent corporation Time Warner had incurred a cataclysmic $500 million loss and was predictably keen to offload its flagging games division. What occurred next has gone down in videogame folklore as one of the most startling turnarounds in the history of the medium.

INSTANT EXPERT

Recording artists that have used the ST include Fatboy Slim, Mike Oldfield, UK one-hit wonder White Town and French knob-twiddler Jean Michel Jarre

The machine was amazingly popular in Germany, where it was used predominantly for desktop publishing and CAD.

The ST was the first home computer to feature built-in MIDI ports.

Released in 1986, the 1040 ST variant was the first personal computer to include 1 MB of RAM. When the price dropped to $999 it famously became the first computer to break the $1,000/megabyte price barrier.

One early tagline for Atari's ST range was 'Power without the price'

Jack Tramiel included the Hebrew alphabet with ST's ROM character set to respectfully acknowledge his Jewish heritage.

Because the Atari ST hardware does not support scrolling, many games used large borders or frames around the playfield to reduce the amount of data that needs to be copied

The last major gaming release for the platform was David Braben's *Frontier: Elite II*, published in 1994.

FTL's seminal real-time RPG *Dungeon Master* made its debut on the Atari ST

The ST is home to what is arguably the world's first multiplayer first-person shooter. *MIDI Maze* used the ST's MIDI ports to permit up to 15 players to duke it out in a rudimentary 3D maze.

Trading Places

Ironically, the man behind the product that would resurrect the ailing Atari brand had previously been instrumental in sullying the fortunes of the company. Shiraz Shivji worked at rival Commodore during the early-Eighties and helped build the C64 – the home computer that stole away vital market share from Atari's 400 and 800 range, as well as its 2600 console. "I became interested in electronics from my early childhood in Tanzania and my education in the UK," says Shiraz, when asked about how he became entangled in the fabric of Atari's history. "I attended the University of Southampton and obtained a First-Class Honours degree and then moved to Stanford University in the US to pursue a PhD in electronics. I was granted a master's and passed the qualifying exam but left before obtaining my degree as I was running out of funds. I started working in Silicon Valley and obtained experience in hardware and software." By 1984 Shiraz had risen to the role of director of engineering at Commodore and it was at this point that fate intervened.

Although Commodore was undoubtedly causing Atari some serious headaches, things weren't exactly harmonious in the boardroom. "Jack Tramiel was president and CEO of Commodore and Irving Gould was the chairman," explains Shiraz. "Irving was the largest shareholder and Jack was the second largest. In January 1984 there was a showdown between the two of them over the role of Jack's sons at Commodore." Polish-born Tramiel had founded the company in the Fifties after enduring a particularly difficult early life (he was interned in Auschwitz concentration camp for five years during World War II), so his insistence on 'keeping it in the family' is understandable. However, Irving refused to budge and this forced Tramiel's hand. He called a board meeting and tendered his resignation. "I was tremendously disappointed and shocked at this decision," remembers Shiraz.

However, it wasn't long before the two men were reunited. "I soon met with Jack and discussed the possibility of joining him if he was to start a personal computer company," recalls Shiraz. "There were a number of senior execs at Commodore with experience in finance, manufacturing, design, engineering, marketing and sales that felt the same way, so I told Jack he could count on a core team to start a company. At this time Warner Communications was thinking of selling or disposing of Atari as it was losing a lot of money. Jack made an offer for the company by injecting $30 million – $25m from himself and $5m from associates, such as myself. Eventually the deal was struck and that is how I came to be the vice president of advanced development at Atari."

Rising to the challenge

Having switched sides in dramatic fashion, Tramiel had a new company to command in the shape of Atari Incorporated. He now needed a product that would get the firm back on its feet. Thankfully Shiraz and his team already had ideas forming. "The core team of engineers and developers were thinking of the next persona computer," Shiraz says. "The work on the ST didn't really start until Atari was actually purchased, but the main ideas of using a 32-bit processor as well as support for music and graphics were already important for us."

Shiraz duly started work on the new project codenamed 'Rock Bottom Price', or 'RBP' for short – an indication of Tramiel's desire to produce a cheap yet powerful home computer. "We moved everyone into the Atari facilities on Borregas Avenue in Sunnyvale in July 1984," says Shiraz, who had to dig into his own pockets to ensure development went smoothly. "I paid for airline tickets and hotel bills for my hardware team using my own personal credit cards and was not paid until much later. I think the real development began in August; we didn't usually get home until 11pm some nights, and sometimes it was well after midnight."

This punishing schedule was made even more demanding because Shiraz knew exactly what would happen if he failed to deliver the goods on time. "If we did not come through we would have had to close shop," he states, matter-of-factly. "You can imagine I really felt the very heavy burden of responsibility. We had no choice but to deliver a product that was superior in terms of performance and price." Amazingly, this intense pressure seemed to bring out the best in the team. "I felt very confident and comfortable that I and the team were up to the task," states Shiraz. "After all, I had a core hardware team of four engineers from Commodore that had worked for me in the past so I knew what they could do. We integrated with people from Atari and had a very small but efficient team that worked very hard to get the hardware done in record time. Somehow, although there was much pressure on us, I did not have any sleepless nights. This is because of the trust I had in the team."

The engineers at Atari originally envisaged the machine as a 'true' 32-bit computer, but eventually compromised and settled for a 32-bit

INFORMATION

Year released: 1985

Original price: £749.99 (with monochrome monitor)

Buy it now for: £10+

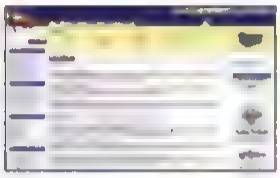
Associated magazines: ST Format, ST Action, Atari ST User, ST World

Why the Atari ST was great... Atari would still be remembered solely as the company that flushed the entire videogame industry down the toilet in the early-Eighties were it not for the saviour that was the ST. It may have lost the war to the Commodore Amiga, but this legendary machine was the first true 16-bit home computer and played host to such seminal games as *Dungeon Master* and *Starglider*. It was also brilliant for bedroom tunesmiths thanks to its built-in MIDI support

COMMUNITY ATARI ST SITES TO WATCH

Atari Museum
www.atarimuseum.com
A robust archive backed by former Atari employees, this site has lots of info, images and other resources. It's well presented, with many sub-sections featuring unique layouts based on classic Atari hardware. Essential if you're interested in the ST and Atari in general.

ATARI.ORG
www.atari.org
A bustling and active community, Atari.org not only contains a wealth of information but also hosts several other sub-sites, run by Atari fanatics. It doesn't look like much but is easy to navigate and is a great place to keep up to date with developments in the Atari world.



Atari Legend
www.atarilegend.com
Solely focused on keeping the memory of the ST alive, Atari Legend doesn't get updated as often as we'd like but still contains a lot of interesting content including reviews, interviews and demos. Well worth a look should you be inquisitive about Atari's home computer.

Little Green Desktop
www.atari.st
The name of this site alludes to the distinctive tint of the Atari TOS operating system, the design may hurt your eyes but the content is excellent. As well as running a spotlight on a particular game every day, it also delves back into old issues of *ST Format*.

YOU'RE A GEM

As the hardware neared completion Shiraz's team naturally began to look for possible operating systems to use with the machine. "The hardware was fairly easy for us to do and we beat the Amiga team to the punch although they had started at least two years earlier," says Shiraz. "The problem we both had was how to get a modern operating system." Early on in the development of the ST, Atari was contacted by Microsoft with the suggestion that the company port Windows to its new home computer. This idea was rejected as Windows was still two years away from being finished, and given the pressing need to get the ST in shops, Atari simply could not afford to waste time. Casting aside the expensive alternative of coding an operating system in-house, Atari got in touch with Digital Research – creator of the GEM system. "Commodore's Amiga team solved the OS problem by going to the UK to get a sophisticated multi-tasking system, but for us we really had no choice but to go with Digital Research," explains Shiraz. "We came up with a deal with Gary Kildall, president and CEO of Digital Research, to licence and use GEM and to use some of his engineers to help port it on the Atari ST. We sent a team of engineers to work in Monterrey where Digital Research was located." It was a task of truly Herculean proportions, as bugs in the GEM system were still being ironed out while the porting took place, but the team (pictured above) succeeded.

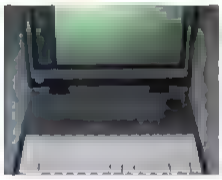
▪ Borregas Avenue, Sunnyvale California – the site of Atari's HQ during the ST years

VERSIONS

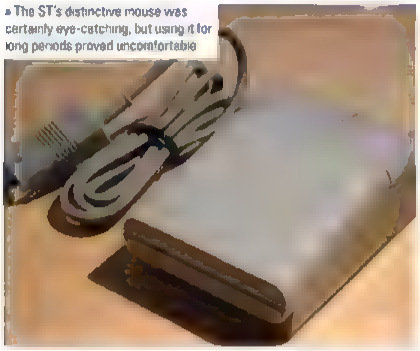
Atari STacy (1987)
Essentially a portable ST, this unwieldy beast ran off 12 'C' cell batteries and would grant a measly 15 minutes of use before exhausting its power supply. Ironically it could imitate the more expensive Apple Mac Portable via emulation and was even faster – proof that the ST's power was not to be underestimated.

Atari STE (1989)
The ST Enhanced was pretty much how it sounded – a slightly improved version of the original machine. It featured a larger colour palette, improved sound capabilities and a new graphics co-processor, but sadly few games were produced to take advantage of this new power, and the machine proved too little, too late.

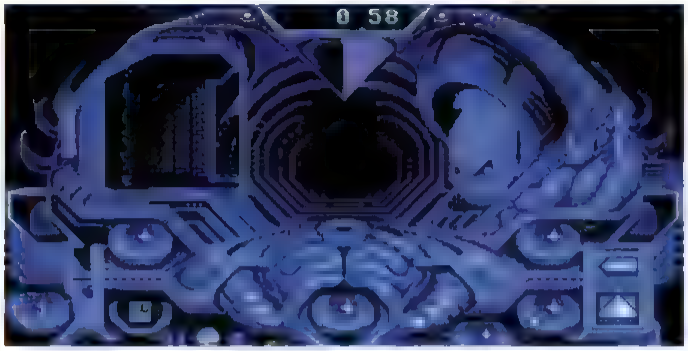
ST Book (1990)
Amazingly, the STacy wasn't a complete disaster and this led Atari to produce a successor – the ST Book. Slimmer and more portable than its forebear, the ST Book was less power hungry because it lacked a backlit display – which naturally made it hard to use in dim light.



Atari Falcon (1992)
The final entry in Atari's home computer range, the Falcon was so hurriedly rushed to market that the casing wasn't ready for launch and so it used the 1040 ST exterior instead. Discontinued after a year, the Falcon remains a popular platform for those interested in hardware modification.



» The ST's distinctive mouse was certainly eye-catching, but using it for long periods proved uncomfortable



» The ST's TOS (Tramiel Operating System) in all its lurid green glory

» The man himself: Shiraz Shivji pictured in the Eighties

processor that communicated through a 16-bit external bus (the abbreviation 'ST' actually stands for '16/32'). "We had a meeting with the CEO of National Semiconductor, who was anxious for us to use their 32-bit NS3200 processor," remembers Shiraz. "It turned out that even though the Motorola 68000 was a quasi-32-bit chip, the performance turned out to be as good, if not better than the National Semiconductor's true 32-bit chip. Motorola had a number of parts that they could not sell as one of the parameters did not fully meet their specification, but we found that this particular parameter could be relaxed in our design and so we could use these parts that would have to be thrown away, saving both us and Motorola several million dollars." Amazingly, despite these cost-cutting measures, the ST was still able to outperform more expensive rivals. "Our design was so optimised for performance and cost that you could emulate the Apple Macintosh – if you had the Apple ROMs – and an application would run faster on the Atari ST," reveals a justifiably proud Shiraz.

As the project neared completion, Shiraz and his team started to realise just how amazing their achievement was. They had taken the ST from rough concept to final product in less than half a year, and when 85 per cent complete ST machines were shown at the CES show in 1985, it amazed the industry. "I was very proud that the team had accomplished so much in a short period of time," says Shiraz. When the machine officially launched in May, it marked the dawn of a resurgence for the previously ailing company and it speaks volumes for the popularity of the ST range that when Tramiel took Atari public in November, stock was selling for nearly triple its original price just a few months later. The ST had saved Atari from the scrapheap, and all in less than half a year.

Business or Pleasure?

It may come as a shock to learn that the man behind the ST isn't much of a gamer. "I'm not into games myself but I am quite aware of what needs to be done in the hardware to create good games," says Shiraz. "With the ST, the processor/memory bandwidth is highly optimised, leading to very fast graphical interactions. I think the entertainment software for the ST was reasonably good, but first and foremost this was going to be a consumer machine." Despite this obvious focus on business, the ST played host to some truly groundbreaking pieces of software and received sterling support from the likes of Bullfrog (*Populous*), Spectrum HoloByte (*Falcon*), FTL (*Dungeon Master*), Realtime Games (*Carrier Command*), Argonaut (*Starglider*) and David Braben (*Virus*).

The ST may have been great for games but it also proved to be a hit with musical types, too. "Right from the start we were interested in providing good musical capability," explains Shiraz. "Since we felt that the Yamaha chip in the ST was not as strong as we would have liked, we thought that we should put in an interface for external music access. We found that we could do it rather inexpensively using a Motorola serial chip and a connector for the MIDI-port. The total cost for this was 75 cents. The biggest problem was finding the space for connectors in the back. Musicians found it a great and inexpensive MIDI instrument."

Sadly, it didn't take long for Commodore's Amiga to overshadow the ST and as the Eighties drew to a close Atari's machine was starting to trail its opponent. US sales dropped off dramatically, but in Europe the machine remained a healthy success. Shiraz has his own theory on this disparity: "The reason is very simple – distribution channels. Atari did not have any distribution channels to speak of in the US. In Europe, on the other hand, we had a great cadre of ex-Commodore people and dealers that we could use."

Ironically, considering they were locked in battle for much of their life spans, the Atari and Amiga are intrinsically linked. "Jay Miner was at Atari in the old days and was involved in the design of their products," explains Shiraz. "He left Atari to design the Amiga. Atari had funded some of this effort and had an option to buy the Amiga and when we took over in July 1984 the first order of business was to decide what to do with this option. The problem was that the Amiga was not quite ready and would need a lot of money to fully acquire. We decided to pass, but this put enormous pressure on our own development team. Commodore, on the other hand, did not have an internally developed 32-bit graphics oriented machine or the confidence to develop anything internally, so they ended up buying the Amiga for between $25-$30 million and spent a further $20 million or so on it releasing it a little after the launch of the ST. The roles were reversed – the Atari ST has a Commodore pedigree, while the Commodore Amiga has an Atari pedigree!"

To claw back some of the market, Atari sanctioned the release of an updated machine, dubbed the STE (with the E standing for Enhanced). Sadly the project failed and few programs took advantage of the STE's augmented capabilities. Shiraz's involvement was minimal. "I was on my way out of Atari at that time. I left in 1989." Other versions of the computer were also put into production, including the ambitious Atari TT and Falcon, but neither of these met with any degree of success. "The problem was that Motorola had lost the processor battle," comments Shiraz. "The TT was based on the Motorola 68030, a successor to the 68000. This processor was clearly inferior to the 386 and 486 from Intel. There was no way Atari could compete with Motorola processors." In 1993, Atari pulled the plug on its range of home computers in order to focus its attention on the ill-fated Jaguar console and sank once again into a period of recession.

Having created one of the quintessential home computer platforms of the past 20 years, what memories does Shiraz hold dearest after all this time? "The teamwork was outstanding," he replies. "Even today most of the members of the team look very fondly at that time as the best years of their lives. The total hardware development was done in the space of five months. I have not seen such an accelerated development for such a complex project in that amount of time."

PERFECT TEN GAMES

There were so many great games released for Atari's ST. Sure, many of them also appeared on its more powerful Commodore rival, but, in all honesty, many of the games featured here proved to be as good, if not better than the Amiga versions. If we've missed any classics, why not submit them in the form of a profile at www.retrogamer.net

01

OIDS

- **RELEASED:** 1987
- **PUBLISHER:** FTL GAMES
- **CREATED BY:** DAN HEWITT
- **BY THE SAME DEVELOPER:** CHAOS STRIKES BACK

01 **We're willing to** put our neck on the line here and say that this *Thrust*-clone by Dan Hewitt is probably the best game of its type. Piloting a triangular V-wing fighter, your job was to travel to a variety of hostile planets to liberate the titular Oids – the planets' imprisoned android slaves. However, working against you was the strong gravitational pull of the planet's surface, which attempted to drag you into its sharp, mountainous maws. On top of this you also had to deal with hordes of rocket-spewing enemy spacecraft and your ship's rapidly depleting fuel gauge. The icing on the cake came in the form of a nifty level editor that allowed you to effortlessly mock up your own planets and galaxies to play through.

XENON 2: MEGABLAST

- **RELEASED:** 1989
- **PUBLISHER:** IMAGEWORKS
- **CREATED BY:** MARTIN DAY
- **BY THE SAME DEVELOPER:** CADAVER

02 **The Bitmap Brothers'** sequel to its seminal shoot-'em-up franchise was entrenched in trippy colours, eye-blistering visuals and a punchy soundtrack by acid house musician Tim Simenon (aka Bomb The Bass). Playing slightly differently to its predecessor, however, *Xenon 2: Megablast* retained the vertical shooter ideals of the original, but would drop the vehicle-shifting and arena-setting for an unusual underwater backdrop, plus a unique vertical-scrolling perspective that allowed players to pull the camera backwards. While *Xenon 2: Megablast* feels somewhat sedate when compared to some of its Eastern contemporaries, the game still proves to be a great blast and this Atari ST port is just sublime.

02

MIDWINTER

- **RELEASED:** 1989
- **PUBLISHER:** RAINBIRD
- **CREATED BY:** MIKE SINGLETON
- **BY THE SAME DEVELOPER:** WAR IN MIDDLE EARTH

03 **Many people are** put off by *Midwinter*'s complexity, but those who invest time into the game are greatly rewarded. Set in Midwinter, a sprawling island forged inside harsh snowy wastelands, the player must try to stop a maniacal general from overthrowing the snowy islet. Playing the role of a police officer, your mission is to explore the island, evade enemy troops, and enlist the support of the islanders. Played out through a first-person perspective, *Midwinter*'s harsh and bitter environment won't be to everyone's tastes, but it's definitely a place that every ST owner and strategy fan should take time to visit.

TIME BANDIT

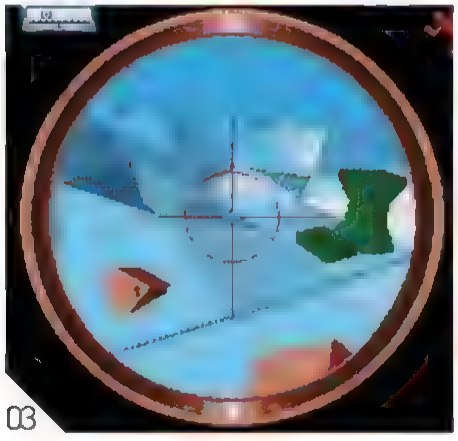
- **RELEASED:** 1986
- **PUBLISHER:** MICRODEAL
- **CREATED BY:** BILL DUNLEVY AND HARRY LAFNEAR
- **BY THE SAME DEVELOPER:** 8 BALL

04 **If you're after** a game that fuses elements of *Pac-Man*, *Bomberman*, *Gauntlet*, time travel and text adventures then you should track down *Time Bandit*. Debuting on the Tandy TRS-80 before being ported to the Amiga and ST, its authors Bill Dunlevy and Harry Lafnear set about refining it brilliantly with the extra power. As a treasure hunter, your mission was to travel to 16 distinct worlds to collect valuable artefacts. One of its neat touches is that many of the levels pay homage to classic arcade games. Shadowland, for example, is clearly a send-up of Namco's pill-chomping maze classic, *Pac-Man*.

NO SECOND PRIZE

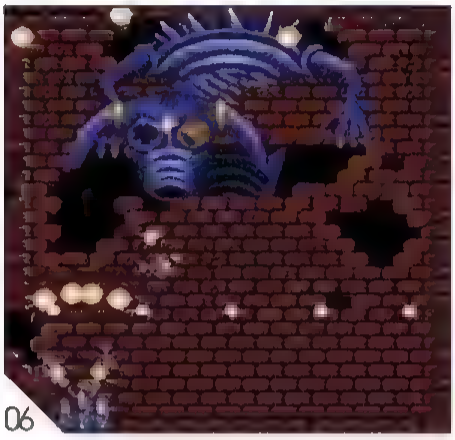
- **RELEASED:** 1992
- **PUBLISHER:** THALION
- **CREATED BY:** CHRIS JUNGEN
- **BY THE SAME DEVELOPER:** ATOMIX

05 **No Second Prize** was a slick 3D motorbike racer that was clearly a few hundred CCs ahead of its contemporaries. The game featured six distinct drivers, 20 well-designed and diverse tracks and some staggeringly smooth scrolling. Bolstering its lavishness were its neat vector 3D graphics, a finely tuned difficulty curve and a sublime electro-rock soundtrack by one of the most established composers in the ST scene – oh and you could edit your own replays after each race, too (it was one of the earliest games to let you do that). If you're looking for a great alternative to the excellent *Stunt Car Racer* then you should really seek out this overlooked ST classic.


03

04

05



06

07

08

LETHAL XCESS

- **RELEASED:** 1991
- **PUBLISHER:** ECLIPSE SOFTWARE
- **CREATED BY:** CLAUS FREIN
- **BY THE SAME DEVELOPER:** STONE AGE

06 **Yet another ST** classic, *Lethal Xcess* is a masterpiece on the ST that pushes its technical boundaries to the limits. While there exist far better examples of the top-down vertical shooter (we've got a making-of one of them in this issue), *Lethal Xcess*'s greedy looking sprites, and frenetic kill-everything-that-moves gameplay struck a chord with ST owners. A sequel to another underappreciated top-down vertical shooter called *Wings Of Death*, *Lethal Xcess* boasted a neat two-player mode and a novel power-up system that allowed you to power up your power-ups. But even with a pal and a super weapon this game is harder than pure maths.

CAPTAIN BLOOD

- **RELEASED:** 1988
- **PUBLISHER:** MINDSCAPE
- **CREATED BY:** PHILIPPE ULRICH
- **BY THE SAME DEVELOPER:** GET DEXTER

07 **The prospect of** getting sucked into your own videogame is one that few programmers – other than the team behind *Rumble Rosas* – would relish, but this is the dilemma facing Captain Blood, and that's only the start of his problems. After being zapped inside his own binary, Blood discovers he's been cloned and each of his doppelgangers are leeching off his life-mojo. It's up to you to travel the galaxy, decipher peculiar alien text and track your targets before it's too late. A mix of *Tron* and *Blade Runner*, with some Giger-style imagery and Jean Michel Jarre tunes thrown in, *Captain Blood* is a gloomy but atmospheric RPG classic.

BLOOD MONEY

- **RELEASED:** 1989
- **PUBLISHER:** PSYGNOSIS
- **CREATED BY:** DAVID JONES
- **BY THE SAME DEVELOPER:** DEEP SPACE

08 **We were toying** with putting *R-Type* on this list, but felt David Jones' *Blood Money* was the marginally better side-scrolling blaster. It's smoother, looks amazing and has an innovative gameplay mechanic where certain enemies would rather pilfer your pockets than cause you damage. Anyway, sticking with the *R-Type* comparisons, *Blood Money* can best be described as Irem's game but set underwater. Controlling a chubby looking red submarine, your mission was simple: avoid hitting the walls, shoot anything that moves, collect the coins and kit out your vessel with all manner of power-ups. *Blood Money* is simple, sublime fun. Be warned, it's no doozey.

09

STARGLIDER

- **RELEASED:** 1986
- **PUBLISHER:** ARGONAUT SOFTWARE
- **CREATED BY:** JEREMY SAN
- **BY THE SAME DEVELOPER:** STARFOX

09 **One of Argonaut** Software's earliest games, *Starglider* clearly has the company's 3D vector stamp all over it. Your mission was to traverse the planet of Novenia and blast away any and all alien craft from inside your AGAV or Airborne Ground Attack Vehicle. Inspired by Jeremy San's love of Atari's brilliant *Star Wars* coin-op, *Starglider* became a high-profile release and a big hit after it appeared in cut-down-for-telly-competition form on popular children's television show *Get Fresh*. Packed with a 64-page novella which was scribed by fiction author James Follett, *Starglider* was an engaging space blaster that slotted nicely between the fast-paced arcade action of *Star Wars* and the immersive reaches of the more strategic *Elite*.

DUNGEON MASTER

- **RELEASED:** 1987
- **PUBLISHER:** FTL GAMES
- **CREATED BY:** DENNIS WALKER, DOUG BELL
- **BY THE SAME DEVELOPER:** HYDROFOOL

10 A sprawling and flawlessly designed first-person RPG that oozed atmosphere, bagged itself a trove of awards and went on to influence a swathe of classic RPG brilliance, including the likes of *Lands Of Lore* and *Eye Of The Beholder*. The game is a brilliant portent of 3D labyrinthine levels, wonderfully imaginative creature designs and accessible RPG elements. It's brilliantly intuitive mouse-controlled interface, glorious colourful visuals, fantastic strident score and real-time combat, helped to make it a huge success around the world. The game has since spawned four sequels, with the latter, *Dungeon Master Nexus*, finding an exclusive release on the Sega Saturn, a game that never found a release outside of Japan.

10

ATARI ST and the rest...

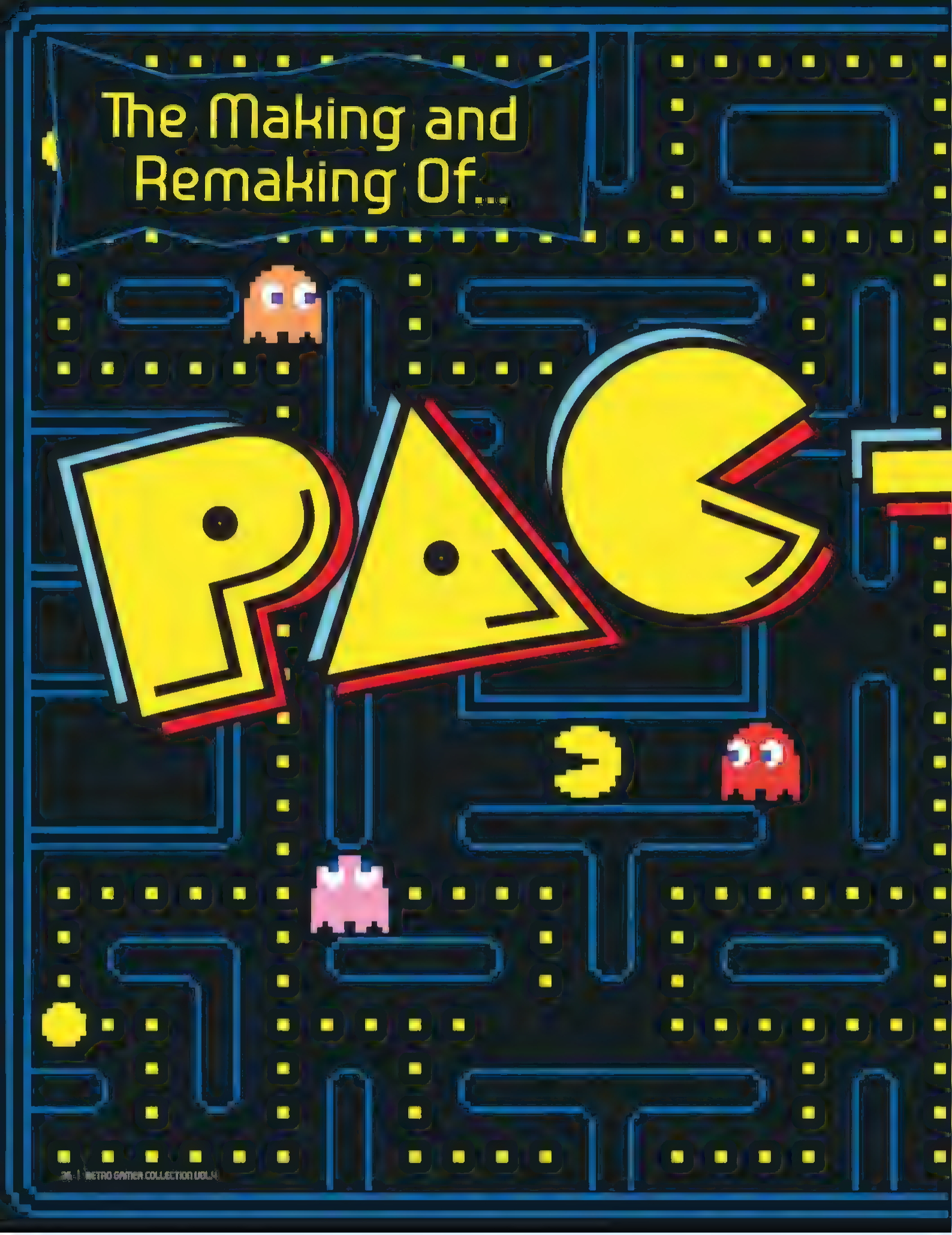
Often seen as a poor man's Amiga, the Atan ST nevertheless had a fantastic assortment of games available for it Here then is a selection of some of its very best and worst titles.

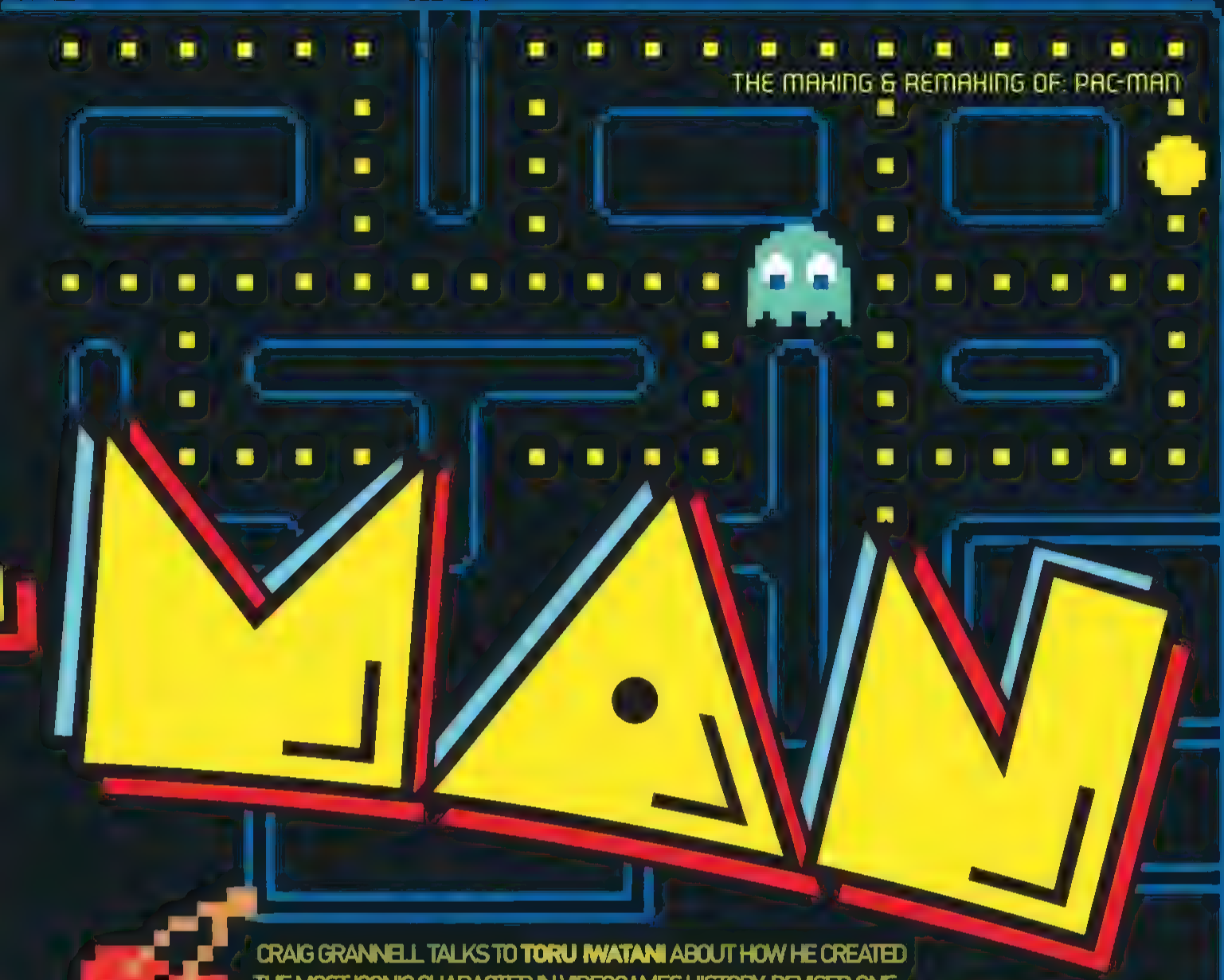
1 [illegible]
2 [illegible]
3 [illegible]
4 [illegible]
5 [illegible]
6 [illegible]
7 [illegible]
8 OPERATION WOLF
9 [illegible]
10 [illegible]
11 [illegible]
12 [illegible]
13 [illegible]
14 [illegible]
15 [illegible]
16 [illegible]
17 [illegible]
18 [illegible]
19 [illegible]
20 [illegible]
21 [illegible]
22 [illegible]
23 [illegible]
24 [illegible]
25 THE SENTINEL
26 [illegible]
27 [illegible]
28 [illegible]
29 [illegible]
30 [illegible]
31 [illegible]
32 [illegible]
33 [illegible]
34 [illegible]
35 NEBULUS
36 [illegible]
37 [illegible]
38 [illegible]
39 [illegible]
40 [illegible]
41 [illegible]
42 [illegible]
43 [illegible]
44 [illegible]
45 [illegible]
46 [illegible]
47 [illegible]
48 [illegible]
49 [illegible]
50 [illegible]
51 [illegible]
52 [illegible]
53 [illegible]
54 [illegible]
55 [illegible]
56 [illegible]
57 [illegible]
58 [illegible]
59 [illegible]
60 TEMPEST
61 [illegible]
62 [illegible]
63 [illegible]
64 [illegible]
65 [illegible]
66 MURDER
67 [illegible]
68 [illegible]
69 [illegible]
70 [illegible]
71 [illegible]
72 [illegible]
73 [illegible]
74 DEFENDER OF THE CROWN
75 [illegible]
76 [illegible]
77 STARGLIDER
78 [illegible]
79 [illegible]
80 [illegible]
81 [illegible]
82 [illegible]
83 CURSE OF THE PHARAOH
84 [illegible]
85 [illegible]
86 [illegible]
87 [illegible]

Special thanks to AtariLegend.com

05
06
07
08 09
11
12
13
14 15
20
21
22
23 24
29
30
31
32 33
38
39
40
41 42
47
48
49
50 51
56
57
58
59 60
65
66
67
68 69
74
75
76
77 78
83
84
85
86 87
TENNIS CUP
TENNIS CUP
namco

The Making and Remaking Of...





CRAIG GRANNELL TALKS TO **TORU IWATANI** ABOUT HOW HE CREATED THE MOST ICONIC CHARACTER IN VIDEOGAMES HISTORY, DEVISED ONE OF THE MOST ENDURING AND COPIED GAME FORMATS, AND HOW HE REVISITED HIS CREATION FOR XBOX 360

With modern-day game characters often being designed and scripted to ape Hollywood movie stars, it's pleasing to note that a yellow circle with an insatiable appetite remains the most enduring videogaming star to date. After all, which gamer hasn't played some variant of *Pac-Man*? According to a May 2008 report by the Davie Brown Celebrity Index (dbireport.com), which scores celebrities to evaluate potential product spokespeople, *Pac-Man* was recognised by 94 per cent of US consumers, outstripping even *Mario*. *Pac-Man*'s appeal is, ironically, akin to Hollywood heavyweights like Tom Hanks and Will Smith.

Part of this appeal is no doubt down to the fun, peaceful nature of Pac-Man and his actions. He explores a simple maze, munching dots, pursued by a quartet of cartoon ghosts. When Pac-Man eats one of the maze's four power pellets, the ghosts turn blue and flee, having suddenly become edible and decidedly non-threatening. However, even when a ghost is consumed, its eyes 'escape', hastily retreating to the central ghost pen, whereupon it's reborn.

Toru Iwatani with an altogether cuddlier version of Blinky/Akabei, along with similarly soft versions of Pac-Man.

This gentle, good-natured gameplay was no accident, as the game's designer Toru Iwatani explains. "In the late Seventies, videogame arcades, which in Japan we call 'game centres', were just playgrounds for boys, and the only videogames on offer were brutal affairs involving the killing of aliens," he remembers. "My aim was to come up with a game that had an endearing charm, was easy to play, involved lots of light-hearted fun, and that women and couples could enjoy."

It's pizza time

Iwatani started thinking about videogame ideas in which the key word was the verb 'eat'. And, yes, the pizza rumour is largely true – suitably, while at a lunch, a fast-food favourite forever changed the course of gaming history. "With 'eat' established as the key word, a shape caught my eye," recalls Iwatani. "I had ordered a round pizza, and it was missing a piece." In a 'eureka' moment, Iwatani says, "the shape of what is now Pac-Man flashed through my mind."

IN THE KNOW

- **PUBLISHER:** NAMCO/MIDWAY
- **DEVELOPER:** NAMCO
- **RELEASED:** 1980
- **FEATURED PLATFORM:** PAC-MAN ARCADE (WHICH WAS SUBSEQUENTLY CONVERTED TO VARIOUS HOME SYSTEMS)
- **GENRE:** ARCADE
- **EXPECT TO PAY:** £400+ FOR A CABINET, 50P+ FOR HOME CONVERSIONS

The Making and Remaking Of PAC-MAN

Hack-Man

With its efficient, simple gameplay and aesthetics, *Pac-Man* was popular fodder for the hacking brigade. Basic hacks involved minor gameplay tweaks, such as speeding things up, while slightly less basic hacks messed about with the maze, graphics and sound, adding to the original game's pristine polish a veneer of sticky and semi-random digital jam. The hideous *Joyman*, with its ghastly audio and broken maze layout, most notably kicked *Pac-Man* in the head with all the subtlety of a size-ten boot.

The most effective hacks are those that respect the original formula – *Hangly-Man*'s amended mazes – but GL's *Piranha* is an exception. Removing the maze and shifting the setting to a claustrophobic underwater cavern – the eponymous piranha pursued by ravenous octopuses – gives the game an edge in terms of focus and originality that other hacks typically lack.

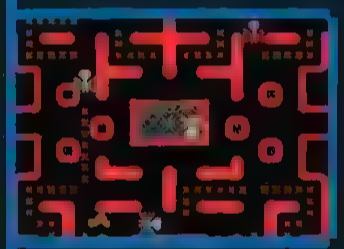
Even in those early gaming days, videogame characters had a little detail, but Pac-Man was forever destined in his first incarnation to remain a yellow disc with a basic mouth, like an incredibly simplified version of Iwatani's lunch. He notes that some suggested at the time that other components should be added, such as eyes, but then there would be no end to the additions. "As design concepts, both Pac-Man and the ghosts have a simplicity and endearing charm," Iwatani says of his decision to keep the graphic design streamlined, also suggesting that the visuals of the game helped it appeal to female gamers of the day.

The elegant clarity of the character design also influenced the game itself. The food for Pac-Man to eat was initially strewn all over the screen, but Iwatani was keen to ensure gamers would immediately know what to do. "I wanted to simplify gameplay operation, and so the idea occurred to me of constructing a maze in which movement was restricted to the four basic directions – up and down, left and right," he says. With this structure in place, the game's objective became more obvious, and the lead character soon gained his moniker, 'Pakku Man', based on Japanese slang 'paku-paku', which describes the sound of the mouth while eating. (The original game's title subsequently became *Puck Man*. The US publisher, Midway, renamed it *Pac-Man* to stop wily hoodlums amending the 'p' in 'puck' to an 'f'.)

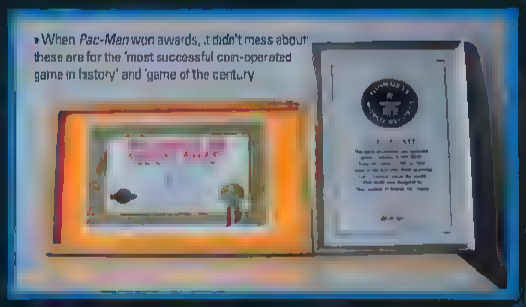
With the game's basic content dealt with, Iwatani realised it wasn't yet much fun, and so enemies were added to the mix, providing tension and excitement, and making it a challenge for players to grab food from the maze. Unusually for the time, Iwatani not only developed rudimentary artificial intelligence for the ghosts, but ensured each one had its own personality of sorts, due to moving and attacking Pac-Man in its own way. "The adversarial TV cartoon *Tom And Jerry* helped shape the relationship between Pac-Man and the ghosts," recalls Iwatani. "Had the programming been such that the four ghosts constantly attacked Pac-Man's present location according to the same algorithm, the ghosts would look like a string of beads. Where's the thrill in that? So I introduced AI-type algorithms that had the ghosts coming at Pac-Man from all directions."

Roll call

And so we were introduced to Blinky, Pinky, Inky and Clyde (Akabei, Pinky, Aosuke and Guzuta in the original Japanese release). According to Iwatani, the ghosts attack in waves, before dispersing and attacking again, which gives the player some regular breathing space and appears more organic than the kind of incessant attacks that had plagued earlier arcade games like *Space Invaders*. (Over time, these waves are harder to identify, and the ghost attacks become swift and relentless, somewhat contradicting Iwatani's desire for a non-stressful game, but providing a necessary long-term challenge for seasoned players.) Although gamers often disagree with exactly how the algorithms work in practice, Iwatani has in the past stated that



> "I designed the game so players of any age and either sex could play it straight away, without reading a game manual" TORU IWATANI



When *Pac-Man* won awards, it didn't mess about: these are for the 'most successful coin-operated game in history' and 'game of the century'

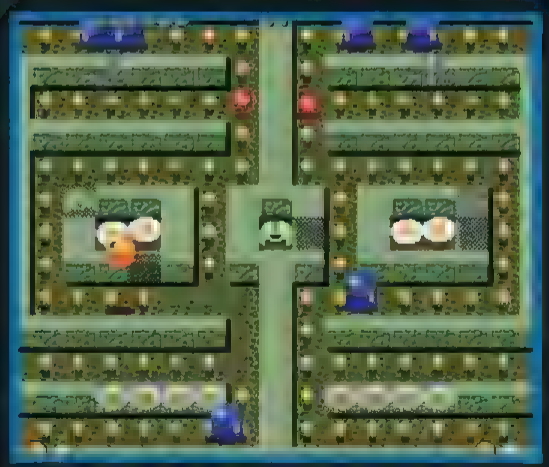
Blinky is designed to chase Pac-Man, but that's Pinky's goal is to aim just in front of Pac-Man, hence why the two often seem to 'sandwich' the hero. The movement of Inky and Clyde is more random, the end result being that Pac-Man is pursued in a natural way, rather than in a robotic, pre-defined manner.

The attacks aren't entirely one-sided, however: as noted earlier, the maze contains four power pellets, which temporarily transform the ghosts into a 'scared' blue form, enabling Pac-Man to turn the tables, hunt and eat them. "The inspiration for the power pellet was the spinach in the TV cartoon Popeye," explains Iwatani. "The power pellets didn't exist in the planning stages at all – they emerged during the development stage as a feature for turning the game around, and made the game vastly more interesting."

Although the completed *Pac-Man* ended up shipping well over quarter of a million units, Iwatani notes that the game's impact wasn't immediate: "In Japan, the game met with a lukewarm reception at first, but it then proved to be a long seller over several years." Amusingly, its success in the USA also took people by surprise, with 'experts' of the time judging *Rally-X* to be 1980's game to watch. However, Iwatani's ability to attract all kinds of gamers, rather than just teenagers keen on blowing up aliens, hit home. "Overseas, it was a massive hit – people who normally didn't play videogames became avid fans, and there was much media coverage of the playing of *Pac-Man*," he recalls.

The game has also stood the test of time, being converted to myriad platforms, and it regularly appears on compilations and various online services to this day. "I designed the game so that players of any age and either sex could play it straight away, without reading a game manual," says Iwatani of his creation's enduring popularity. "The game also contains numerous detailed stratagems for reading the players' psychology."

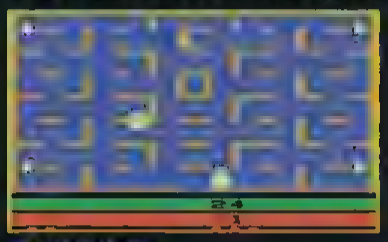
Perhaps unsurprisingly, Iwatani claims he'd not revise his game, given the chance to go back and do so. "At the design stage, there was a 'shutter' feature, which opened and closed, acting as an obstacle in the path of the maze," he says. "But I'd change nothing from the final game. Why? Because *Pac-Man* is complete to such an extent that to add or to subtract anything at all would be unacceptable."



» **[Arcade]** Semicon's mid-Nineties *Hyper Pacman* provides an almost *Bomberman*-like take on *Pac-Man*, throwing strange boss fights into the mix.

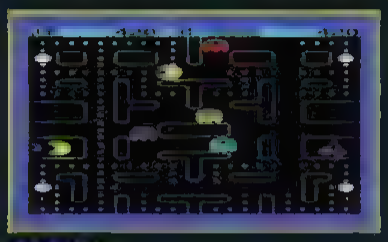
Conversion capers

With myriad Pac-Man conversions available, we look at the most curious examples



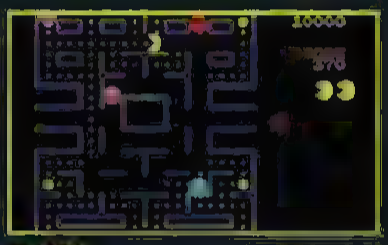
ATARI 2600

Embarrassingly drawing attention to itself via an 'Atari National *Pac-Man* Day', this conversion supposedly resulted from marketing pressure. A flickering mess, the game's dreadful maze layout and ropey gameplay led to a shortfall in sales, with five million cartridges left gathering dust.



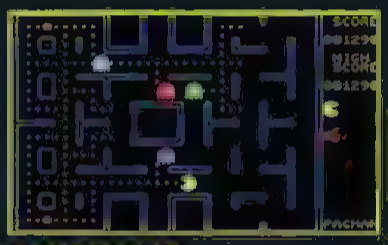
VIC-20

While most VIC-20 owners had Atarisoft's dire conversion, Japanese Commodore fans were enjoying HAL Laboratories' superior take on *Pac-Man*. Commodore renamed the game *Jelly Monsters* outside of Japan, but fell foul of Atari's legal hammer of doom, and withdrew the game.



MSX

Namco's 1984 MSX release eschewed the horizontally stretched mazes of most home conversions, instead shifting the score display to the side of a smaller maze that retained the arcade parent's aspect ratio. This device remains in use today – eg: in *Pac-Man* plug-and-play TV games.

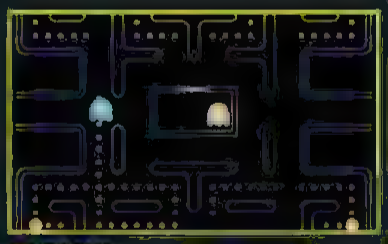


FUJITSU FM-7

Instead of following the MSX conversion's method of dealing with varying aspect ratios between arcade and home screens, 1984's Japanese FM-7 *Pac-Man* release rotates the maze by 90 degrees. This means no stretched maze and no weeny graphics, but the change disorientates.

GAME BOY ADVANCE

A touch of the crazies descended over Nintendo HQ when the NES Classics line reached Europe. With collectable boxes ditched and prices raised, you got a botched port of the bog-standard NES conversion for more than the superior *Pac-Man Collection* cost at the time. Nice.



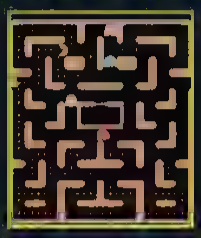
iPHONE

The *Pac-Man* conversion for Apple's handheld is mostly unremarkable and accurate, but the lack of tactile controls results in curious control methods: 'swiping', an on-screen D-pad, and tilting to move Pac-Man. Swiping works best; directions are confirmed via an on-screen joystick.

The Making and Remaking Of PAC-MAN

Pac-Man milestones

A brief overview of notable arcade-based

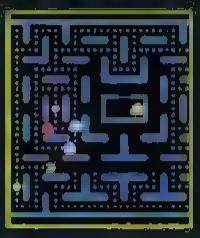


MS PAC-MAN (1981)

Fed up waiting for Namco's *Pac-Man* sequel, US distributor Midway struck a blow for gender equality by releasing GCC's *Pac-Man* hack. Along with speeding up the game and amending the hero, *Ms Pac-Man* includes new mazes, more varied ghost behaviour and moving fruit.

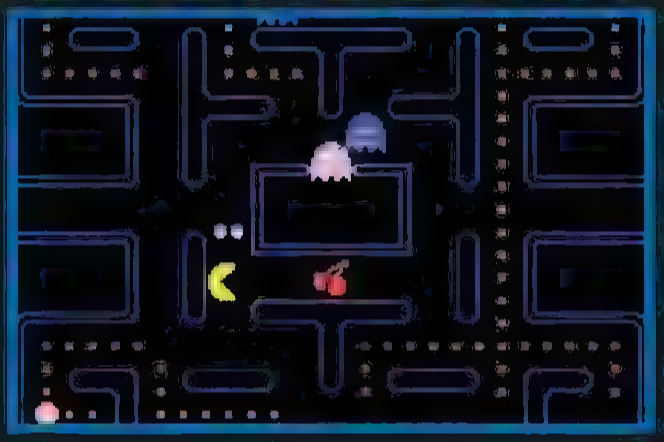
SUPER PAC-MAN (1982)

Namco's *Pac-Man* sequel disappointed many outside of Japan, due to the fact that the gameplay was substantially altered. You still clear mazes, but munch targets behind gates that open when keys are guzzled. A 'super power dot' makes Pac-Man grow Hulk-like, to devour everything in his path.

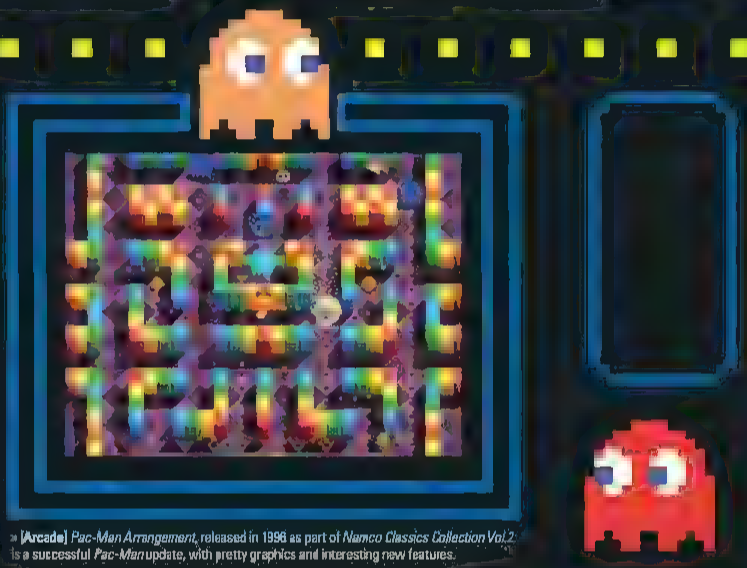


JR. PAC-MAN (1983)

Midway again did the naughty, creating this effort without permission, and Namco terminated Midway's licensing agreement. Namco still doesn't recognise the game as official. With its scrolling levels obliterating the original's tightly honed strategic gameplay, it's easy to see why.



» **[Arcade]** UA rampaging *Pac-Man* on level one devours a ghost before laying eyes on the cherries. Meanwhile, a resurrected Pinky sets out for revenge.



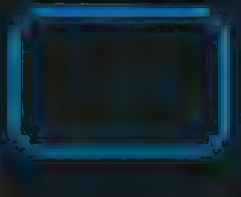
» **[Arcade]** *Pac-Man Arrangement*, released in 1998 as part of *Namco Classics Collection Vol.2*, is a successful *Pac-Man* update, with pretty graphics and interesting new features.

DEVELOPER HIGHLIGHTS

LIBBLE RABBLE (PICTURE!)
SYSTEM: ARCADE
YEAR: 1983

PAC-LAND
SYSTEM: ARCADE
YEAR: 1984

RIDGE RACER
SYSTEM: ARCADE



Return of the Pac

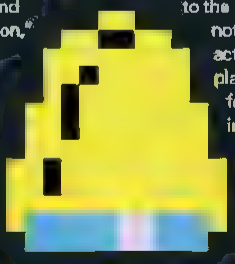
Despite having worked on a range of titles over the years, including *Time Crisis* and *Ridge Racer*, it's clear Iwatani's heart always remained with his disc-based creation. During the Eighties, he was involved in both *Pac-Land* and *Pac-Mania*, with the former being his favourite. "It pioneered action videogames in which the scene flows horizontally. According to its creator, Shigeru Miyamoto, Nintendo's *Super Mario Bros.* was influenced by *Pac-Land*," he says, proudly.

However, it was during 2006 that Iwatani finally got the chance to both return to *Pac-Man*'s roots and design an engaging, modern-day evolution of his original creation. Instead of the arcades, the chosen platform was Xbox Live Arcade, and the game became *Pac-Man Championship Edition* (*PMCE*).

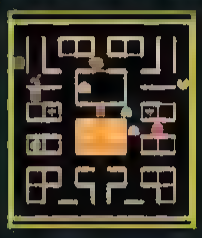
"The time was right for a next-generation *Pac-Man*, because the Xbox Live Arcade environment supports real-time competition with score-ranking via the internet, and improved design through its hardware specification," explains Iwatani about the origins of *PMCE*. "My aim with the game was to achieve legitimate evolution, with simplicity of game design and absence of the superfluous as my guiding principles, because, in my opinion, few players look for complexity in gameplay."

Guided by the same ground rules that defined *Pac-Man* – immediacy, simplicity, immunity to language and cultural differences and "that sense of wanting to play and have fun, which is what the world's videogame players are looking for" – *Pac-Man Championship Edition* broadly retains the original's core gameplay, tasking the player with navigating a maze to eat dots, fruit and power pellets and avoiding roaming ghosts. However, some major changes were made to the formula, in order to keep the game relevant and ensure it was more than just the original game reskinned.

Rather than the player having to clear a maze to proceed, *Pac-Man Championship Edition* plays like a time-attack game, and the player has a strict time limit in which to score as many points as possible. As with *Pac-Man*, this is done by consuming dots and 'scared' ghosts, but the longer you stay alive, the more each dot is worth (and the faster the game becomes). Also, the maze is now split in half. Clear one half of dots and bonus fruit appears in the other; eat said fruit and new dots are spawned in the previously cleared half. "The horizontal maze came about due to the prevalence of widescreen displays," explains Iwatani, noting that the split-maze device also creates non-stop action, unlike the original *Pac-Man*, which 'interrupts' players upon a level's completion. "And the timeout feature increases the sense of speed and excitement in the game, making it a very thrilling experience. Also, score ranking via the internet provides competition, which has been a great success." Iwatani adds that one of the key aims was to have people worldwide competing, the logical modern-day equivalent of Eighties' high-score table on the original *Pac-Man*.

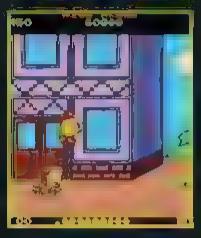


Pac-Man follow-ups



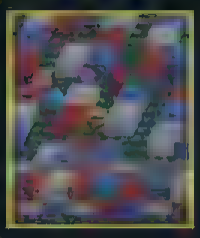
PAC & PAL (1983)

Here, Namco again moved further from the original *Pac-Man*. Ghosts can only be stunned rather than eaten, and now flipping cards opens gates to reveal items. The 'Pal' of the title is the infuriating Miru, who makes off with your bonus items, taking them to the inaccessible ghost pen.



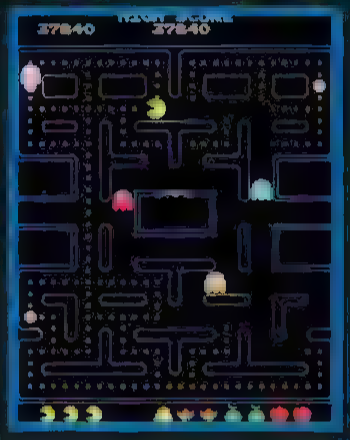
PAC-LAND (1984)

Pac-Man finally left the maze, gained legs, arms and a face, and was tasked with battling through this early side-scrolling arcade game, its levels peppered with *Pac-Man* imagery. Although repetitious, the game is initially fun and it's more successful than Namco's previous two efforts.

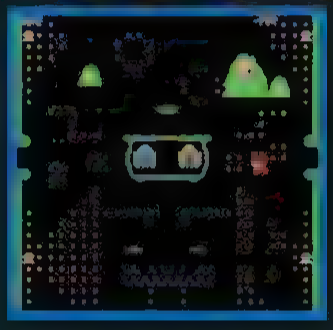


PAC-MANIA (1987)

Pac-Man finally returned to his roots in *Pac-Mania*, although as you can see his surroundings are markedly different. The isometric maze scrolls, and the ghosts tend to roam in packs. Although, in Pac-Man's favour, he can now jump and he occasionally finds bonus items that speed him up.



» **[Arcade]** Namco Bandai has revealed that a new game will be released to celebrate 30 years of *Pac-Man*.



» **[Arcade]** *Piranha* is a decent *Pac-Man* hack, removing the maze and thereby creating a different and tougher game.

> **"Pac-Man's guiding principle is 'fun first'"** TORU IWATANI

With grateful thanks to Tetsuya Hayashi for invaluable assistance in realising this interview.

Perhaps ironically, *PMCE* was, unlike *Pac-Man*, critically acclaimed right from the start. 1UP.com ranked it alongside *Geometry Wars* in terms of a classic game format being reworked, noting that it was "a lot more than just a tarted-up *Pac-Man*." Joystiq's Jared Rea blogged: "A better name for it would have been *Pac-Man 2*, [...] a name that gets the point across that *Pac-Man Championship Edition* is the first true sequel to the game since *Ms Pac-Man*."

Iwatani modestly suggests that some of the acclaim might be due to low expectations for a *Pac-Man* game, and says the response of game players exceeded his expectations, citing the many internet-based critiques that offered "splendidly glowing evaluations". (Happily, and despite claims to the contrary, Iwatani also assures us that *PMCE* is not necessarily to be his swansong, since he continues to be involved in videogame production. So, take that, internet rumour mill!)

Pass it on

With 30 years of experience in videogames design, including the most iconic games character of them all, Iwatani is now, perhaps suitably, involved in teaching aspects of videogames design to students at Tokyo Polytechnic University, along with conducting research into games for social purposes. Although *Pac-Man* has always remained popular throughout the years, we wondered what Iwatani made of the games industry's tendency towards over-complication and movie-like games, along with the relatively recent resurgence in retro-orientated titles. "We should carefully gauge the preferences of light users who normally don't play videogames, and the preferences of videogame aficionados, and then design products to suit each," he suggests, thoughtfully. "A sumptuous party dress may be of limited practical value in daily living, and the same applies to over-elaborate videogames in the videogame market." On retro titles – 'pick up and play' games popularised by the internet, XBLA, Nintendo DS, Wii and iPhone – Iwatani thinks this might be a sign that the actual game, rather than aesthetics, is again becoming the main concern for developers: "Hardware specifications 20 or 30 years ago restricted powers of expression, and so the rules of the game were decisive in attracting users. The current boom in retro games is evidence of a universal fascination with game-playing itself."

We finish the interview by returning to *Pac-Man*, who recently celebrated his 30th birthday. How does it feel to be the designer behind a game that almost everyone knows – one that perhaps only *Tetris* can challenge in terms of widespread appeal? "People view the work in different ways, from different viewpoints. Some see it as being broad and shallow. For others, it is narrow yet deep and praised," considers Iwatani. "What is gratifying about this is that people find such different reasons for loving it." And as a final word, Iwatani reckons that there are still things his 30-year-old creation can teach modern-day games designers, developers and publishers. "*Pac-Man* is the perfect videogame because its design gives top priority to the player and to a spirit of service," he says. "Its guiding principle is 'fun first'. This concept is in my view invincible and what I look for in the videogame creators of today, that they understand the importance of capturing people's hearts."

RYGAR: THE LEGENDARY ADVENTURE

Okay, it's actually a lava monster, but you have to admit this creature (which crops up in stage four) shares an uncanny resemblance

After stage 19 you're on your own, with no extra continues, it's just you and the machine. Some argue that's exactly how it should be

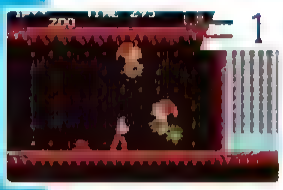
Rygar contains plenty of secrets to discover and finding them all isn't easy, or obvious. The game is quite a little score-attack affair

If you dawdle around and the timer runs out, you're ushered along by this giant monster called Death. As his name suggests, he's bad news

> The game's mantra is clearly frantic action and keen reaction

THE CONVERSIONS

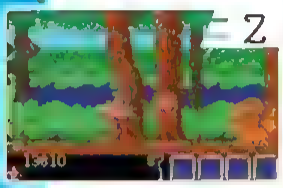
How the various versions compare



1 NES

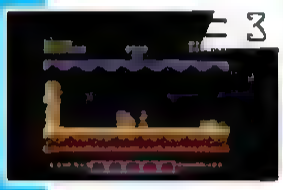
BEST VERSION

Not an uncommon thing for NES arcade ports, Tecmo completely rethought *Rygar* for its NES debut. The frenetic action was toned down and instead there's a more considered action/adventure approach to the game. A great, if somewhat controversial, conversion.



2 ATARI LYNX

The Lynx is a wonderful piece of kit that boasts some wonderful arcade conversions. And *Rygar* is one of them. It looks and plays brilliantly with blown-up sprites filling the entirety of the screen. It feels less chaotic than the arcade version, but it's excellent nevertheless.



3 AMSTRAD CPC

The good old Amstrad pulls out a magnificent effort with its *Rygar* conversion. Clearly (and not because we're biased) this is clearly the best version out of the 8-bit micros. The game looks great, thanks to some tactile controls, and it plays great too. Nice one Arnold!

4 COMMODORE 64

We actually don't think this is a bad port at all. The game certainly looks and feels the part – it feels almost identical to the excellent CPC version, albeit slightly dourer in look and suffering from controls that don't feel as responsive. Not a bad conversion though.

5 MASTER SYSTEM

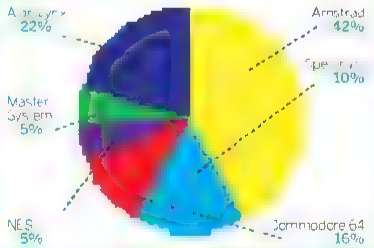
This version sadly never made it out of Japan, and there's a very good reason for that: it's not very good at all. The game might look the part, but like the NES port, the gameplay is tweaked slightly. The game adds underground sections that you need to traverse to finish the level.

6 ZX SPECTRUM

WORST VERSION

Oh dear, usually the Spectrum shines when it comes to side-scrolling shooters, but sadly it doesn't pull it out of the bag this time. Ugliness and fart noises aside, our biggest issue with it is the poor controls – firing while jumping being particularly annoying.

FORUM OPINION



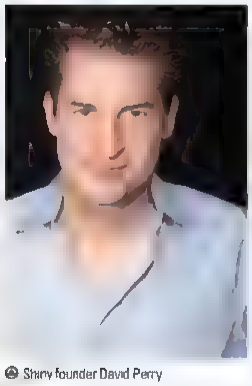
"It's Lynx for me, liked it better than the Master System version due to the mention of it bringing up painful childhood memories."
– **TwoHeadedBoy**

"I'm an Amstrad fan but I've really got a soft spot for the Speccy conversion. It's as tough as old boots but it plays really well."
– **gmintyfresh**

DEVELOPER LOOKBACK

SHINY WILL ALWAYS BE REMEMBERED FOR MAKING A HERO OUT OF A WORM; BUT ITS ACHIEVEMENTS STRETCH FURTHER THAN THE IRREVERENT AND SURREAL. SHINY WAS A BREATH OF FRESH AIR AND PERHAPS THE FINEST 2D DEVELOPER TO COME OUT OF THE WEST... FROM MIKRO-GEN TO MDK, STUART HUNT TALKS TO DAVID PERRY ABOUT THE HISTORY OF SHINY

Shiny Entertainment (Part 1)



Shiny founder David Perry

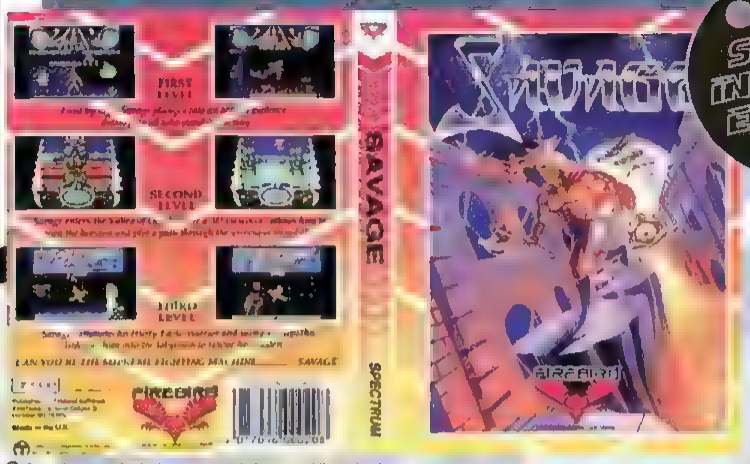
While England had come to fully embrace the computer age, Northern Ireland, not by choice, was trailing slightly behind. Belfast, during the Seventies, was in a time of unrest. Conflict was rife – on the streets and inside parliament – and its economy was unsteady. In a bid to try to cushion the uneasy economic climate of the time, the British Government invested money into Northern Ireland's education sector.

Born in 1967, Shiny founder David Perry grew up in the towns of Templepatrick and Donegore, in County Antrim. He attended the Templepatrick Primary School before going on to study at the Methodist College Belfast. When David was 15, the Methodist College had been on the receiving end of a national grant and would invest the money in computer equipment.

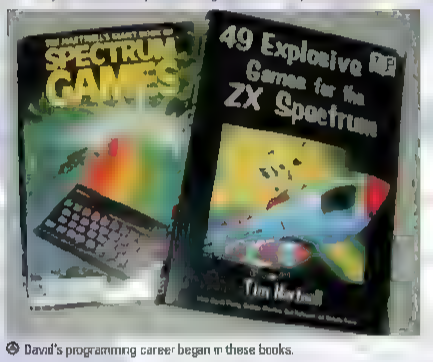
"There wasn't a single person in the building who knew what to do with the money," recalls David. "There was this guy called Richard Naylor, who ended up becoming head of the whole computer department, and he set up this whole infrastructure and bought lots of computers. We had computers coming out of our ears, and the teachers really didn't know how to use them. It almost became a competition between the students and teachers to see who could learn to use them first."

The school had acquired everything from business computers like the Research Machines 380Z to Acorn Atoms, ZX81s and BBC Micros, but it was the short-lived ZX80 add-on – the ZX81 – that really piqued David's interest.

"After being introduced to the ZX81 at school, I asked my mother if she would buy me one, which she did, and I started playing around with it," David remembers. "Very quickly you learn that when you're learning BASIC you can actually take control of the computer. You might be writing the world's worst videogames but they're cool



Savage's box art clearly shows the game's three very different levels.



David's programming career began in these books.

Written, not illustrated, by David. We think

SHINY INSTANT EXPERT

Shiny's name was based on the REM song *Shiny Happy People* as it was playing on the radio at the time the company was formed.

David is six feet eight inches tall he's even taller than Phil Harrison (they've checked)

In these old days, to hack your code into a new piece of gaming hardware you didn't know (from a business machine that didn't have a chance of connecting to it), you would simply make a cable that simulated someone wagging the joystick (incredibly fast) and then handwrite a bit of code at the other end that would decode what the joystick seemed to be doing, then store that in memory. So basically one computer that you program and make graphics on would wiggle the joystick until the code it wanted to transmit over would end up in the destination games machine. Painfully slow, but plenty of games were made that way!

Edge magazine made a framed special edition *Edge* cover once for Shiny. "It was on our wall the entire life of the company," admits David. It was issue 0, with Earthworm Jim on the cover. It was a 3D model of Jim made by Softimage, who was a big fan of the game.

In the Earthworm *Jim* animated series, Jim was voiced by none other than Dan Castellaneta who's more commonly known for voicing everyone's favourite mustard face, Homer Simpson. The show aired for a total of two seasons.

An Earthworm Jim movie was also considered after David received a call from a director from the Jim Henson Company. The director was interested in doing a 'puppet' movie with the super-powered annelid in the fore. Sadly the deal was quashed by Universal, who owned the rights of Earthworm Jim.

David has developed a total of 32 games in his career and was lead programmer on 24 of them.

It's estimated that David's games have yielded over three quarters of a billion dollars in sales.

Through his flair for bringing to market some of the most impressive licensed videogames ever released, David's reputation has seen him work alongside Hollywood's elite, including legendary film producer Joel Silver and the directors, the Wachowski Brothers.

to you because you made them, and that's when it gets a little addictive. These were the days when everything was black and white. There were no real graphics, you would play as the letter A, or letter V, so you didn't require any artistic skills, and there was no real need for music skills – only when the BBC Micro really got going did that start to pick up. I guess the point I'm trying to make is that the barrier to entry was surprisingly low, you could make a game out of almost anything."

David found it very difficult to purchase games for his ZX81, so instead found enjoyment from inputting the program listings inside of stapled computer magazines. Over time his programming skills grew, and, after sending one of his programs into the National ZX80/81 Users Club magazine, David caught the eye of Tim Hartnell.

"I got really excited about that, because I'm at school and here I am featured in the magazine," he remembers. "So I sent them more of my programs and finally one day they sent me a cheque in the mail for £450. I nearly fell off my chair. I didn't ask them for any money, I wasn't doing it for the money; I didn't even have a bank account to put the money into. And you can imagine the penny dropping because I was like, 'Hold on a second, if I can earn £450 just mucking around, what if I was really focused on this.' And that's when I started programming like crazy."

Tim Hartnell was the editor of the magazine and went on to become a significant author in the field of ZX81 and Spectrum. Impressed by David's tenacity and programming talents, Tim approached David and asked him for his assistance with a book he was compiling. David agreed, and what began as contributing a few pages of programming code to his latest tome soon led to David writing an entire chapter. After the book was published Tim asked David whether he'd like to write another book, this time by himself. He did, and the book, *Astounding Arcade Games For Your Spectrum + & Spectrum*, would go on to sell around 8,000 copies.

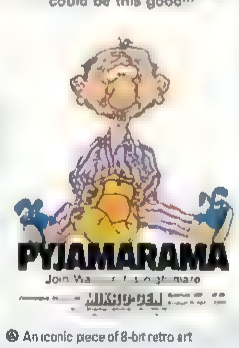
In the book, David had included a BASIC game called *Drak Maze*. It was a lengthy program which, in retrospect, David admits was a little too laborious to expect anyone to sit down and type out. David sent a copy of *Drak Maze* to Mikro-Gen (a UK-based game publisher), and the publisher immediately asked David whether he'd be interested in upping sticks and joining the company. He was still just 17.

"I hadn't finished my degree or anything," he recalls. "And my teachers were a little concerned. I guess it was like saying you're going to leave school to become a professional skateboarder. At that time the videogame industry didn't really exist as a career choice. It certainly wasn't something the academic world was appreciating at that time. It was a tough decision but I decided I was going to do it, and I accepted the offer of just £3,500 a year and moved to England. So I joined Mikro-Gen and I actually thought I was a better programmer than I turned out to be. I was sharing this office with professional programmers and, being self taught, I remember panic setting in and thinking, 'God, I really don't know how to write a 'professional' game and now I really need to make one'."

The first hurdle that David needed to overcome was learning how to take the skills that he'd acquired from programming BASIC in his bedroom and apply them to Z80 assembly language. He fumbled his way through with his first Mikro-Gen game: the unreleased, *Potholing Pete*.

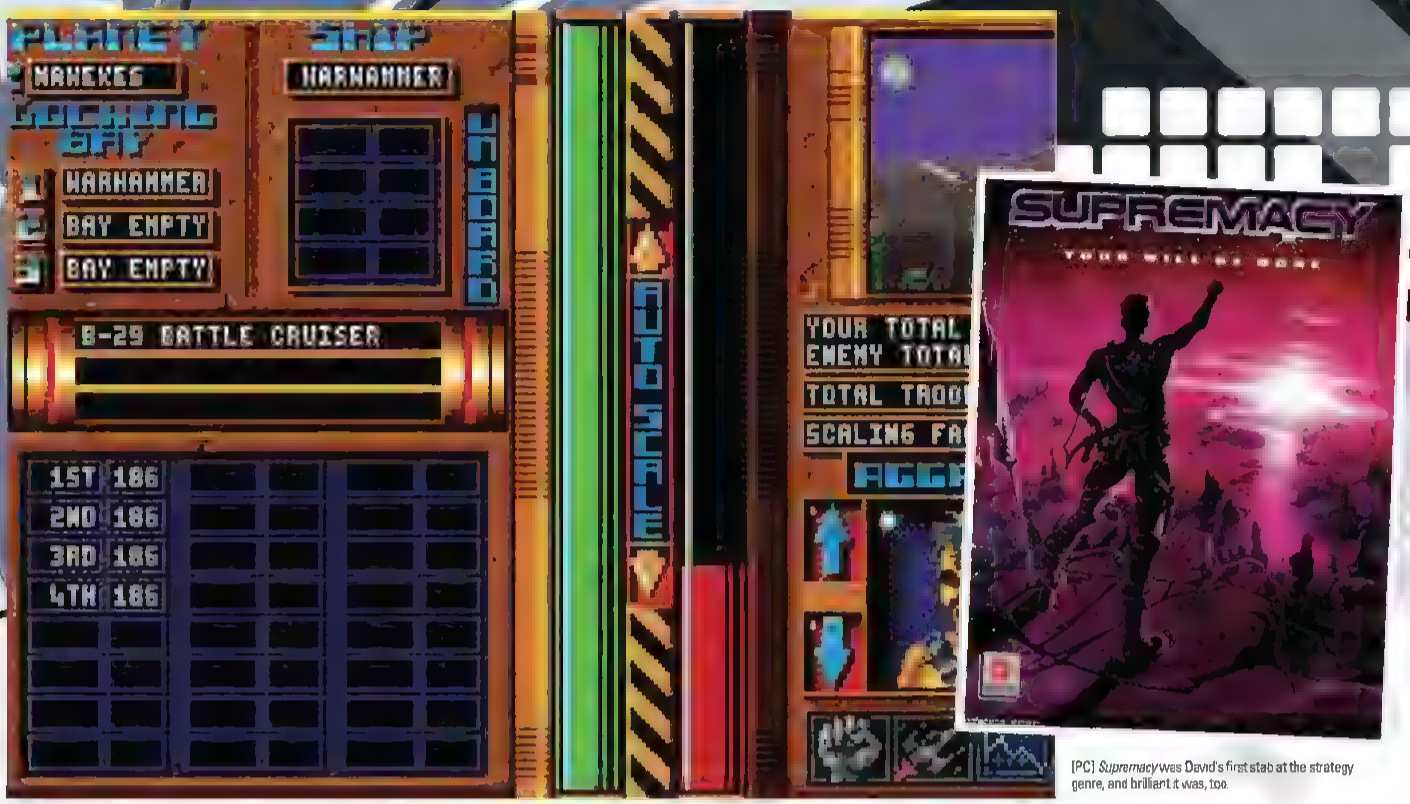
David reveals that *Potholing Pete* was a platformer starring a little character with a big hard hat. The premise of the game saw your character Pete, travel underground and the action would play out inside a variety of cavernous levels.

"It was really more of a test to see if I could get sprites going and everything else and I did," David explains. "But I guess the point of the mechanics of laying out all the

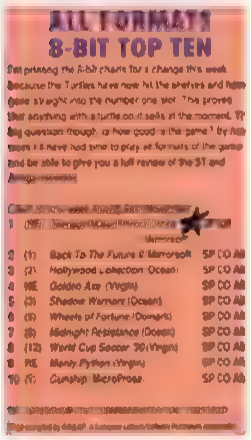


An iconic piece of 8-bit retro art

DEVELOPER LOOKBACK



[PC] *Supremacy* was David's first stab at the strategy genre, and brilliant it was, too.



It's true, anything with a turtle in it does sell

levels and making it flow well was really where the rubber meets the road."

As David was working on *Potholing Pete*, Mikro-Gen was planning the sequel to its successful platformer, *Automania Pyjamarama* saw returning protagonist Wally Week switch from being a scatterbrained mechanic to someone trying to escape the confines of a colourful night terror. The lead programmer on *Pyjamarama* was Chris Hinsley, and David was tasked with taking Chris's Spectrum code and trying to get it working on the Amstrad. "Chris was a great programmer and when I got to look in his code that really changed everything for me," says David. "Finally getting to work with professional code was like someone giving you the keys to a sports car, it all gets very dangerous from that point on, so you either have lots of fun, or die!"

David succeeded in getting *Pyjamarama* to run on the machine, through hacked hardware to get the game code into the machine. The first review for the game was 10/10, David breathed a sigh of relief and the game proved to be yet another success for Mikro-Gen. After *Pyjamarama*'s release, Chris then went on to make *Everyone's A Wally*, and David worked on a peculiar spin-off *Wally* game entitled *Herbert's Dummy Run*.

After *Everyone's A Wally*, Chris Hinsley's next project was to work on the Spectrum game *Battle Of The Planets* (he wanted to learn 3D), and the *Wally* series was handed over to David. His response was to create what many still herald as the best game in the series: *Three Weeks in Paradise*.

"*Three Weeks In Paradise* was where things really started to get really interesting for me because the games were selling very well and Mikro-Gen was making a lot of money – almost to the point where we were starting to get a little cocky. This is when we decided to make our own hardware and where the idea for the Mikro Plus came from," recalls David.

The Mikro Plus proved a disaster for Mikro-Gen, costing the company many thousands of pounds. Working like a RAM expansion pack when it was hooked up to the Spectrum, the Mikro Plus made it possible to eke an extra 16K worth of storage space on the normal 48K machine. Despite its quick collapse in the market, David is quick to jump to the custom cartridge's defence, praising its creator, Andy Laurie, for having the foresight and ability to build such an elegant yet simple hardware design, without any help.

"The Mikro Plus was a very clever piece of electronics," says David. "Andy found a way to swap out the Spectrum ROM. I don't know how he ever worked it out, because back in those days there was no manual, they just tinkered around until they found out how to do it. He basically overlaid the official Spectrum ROM chip with an EPROM chip (that we could burn game code onto), so we suddenly had more storage memory than anyone else in the business. If you think about it, it was a pretty stunning concept at the time. You've got space to make a 48K game and that's what everyone's programming with, but we get an extra 16K that no one else was getting."

What should have been a success story, securing Mikro-Gen continued prominence in the Spectrum market, would have the adverse affect. Two games were planned to utilise the Mikro Plus technology; a colourful looking adventure game called *Shadow Of The Unicorn*, and *Three Weeks In Paradise*. David recounts the story:

"So we decided to put two games onto this new machine. *Shadow Of The Unicorn* shipped first. It went out there and it died. Like corporately, it was a disaster, retailers were upset, so much so that Mikro-Gen couldn't afford to do a second game using the technology. The technology was basically destroyed by one game. As a result I was sitting there with a version of *Three Weeks In Paradise* far too big to fit in a normal Spectrum," David continues. "But that proved to be a really useful learning curve for me. I soon learned that cherry-picking (over-designing) is actually a good way to improve your game. Basically, we

CPC] *Trantor* is an office favourite – big guns, big graphics and a great story.

CPC] *Beyond The Ice Palace*, David's homage to *Ghosts 'N Goblins*, perhaps? Coincidentally also published by Elite.

were left to sift through the game and take out the bits that weren't so good. As a result I think we ended up with something better than we would have, had we shipped *Three Weeks In Paradise* without the hardware."

Shortly after the release of *Three Weeks In Paradise*, Sir Clive Sinclair announced the release of the 128K Spectrum. Sitting with one of the biggest Spectrum games as far as memory goes, David was able to port *Three Weeks In Paradise* on to the Spectrum 128 incredibly quickly in an enhanced form, with extra screens and even smoother gameplay. "I was excited about meeting Sir Clive, as I pretty much owed my career to his machines," David remembers.

As the story unfurls, David left Mikro-Gen so that he could start up his own coding shop, which he ran from his home. The first job he landed was to work on the Spectrum port of *Ikari Warriors* for Elite, but he admits that he never got to finish it. Elite had peculiarly sourced the job of porting the game on to the Spectrum to two coders: David Perry and David Shea. But it was Shea's code that Elite eventually selected. Consequently, during *Ikari*'s development, David was reassigned to work on another game: A *Ghosts 'N Goblins*-style platformer called *Beyond The Ice Palace*, a project that gave David his first taste of managing people.

"Elite wanted *Beyond The Ice Palace* in all formats so I ended up hiring in friends to handle the workload," David recalls. "But being young and naive it was tough running around for all those different people. I soon realised that it was *way* more fun working for yourself than having to manage people, so I soon ended up going back to do my own stuff again."

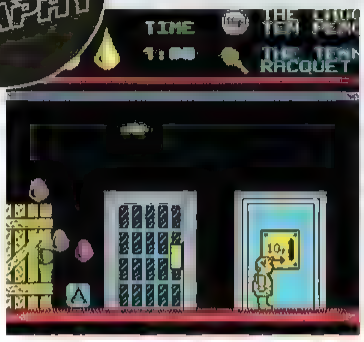
The next project David worked on was the port of the arcade game *Great Gurianos* (aka *Gladiator*) for Elite. *Great Gurianos* featured a realistic combat and damage system – one hit could kill, but, as David admits, his home port possessed a rather large flaw.

"It took so long for the arcade machine to arrive that I'd already finished *Great Gurianos* by the time it showed up," David recalls. "I programmed the game and then found I had run out of memory; I didn't have any room to add an end sequence. So I made the final boss impossible to beat, which is programming and game design sacrilege, but I remember chuckling to myself as I did it. That kind of shows you how loose everything was back in those days. For me *Great Gurianos* was a turning point. That's when I realised I had to get my shit together and become more professional. And that's when I hooked up with Probe Software."

At the time that David met up with Probe Software, the company had just acquired the *OutRun* licence. David was impressed with the company's professionalism and Probe seemed interested in David's programming background. During the meeting, Probe showed David a demo of *Trantor: The Last Stormtrooper* running on the Spectrum, and David rakishly mentioned that he could get the thing running on the Amstrad. Within 24 hours he had done just that. Impressed, Probe offered David a job immediately and put him to work on finishing his Amstrad port of *Trantor: The Last Stormtrooper*.

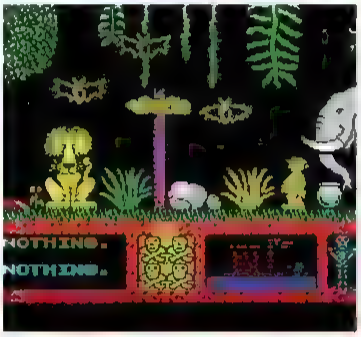
"Then what happened was that the artist of that project, Nick Bruty – who later turned out to be the lead artist on *MDK* and everything else – approached me with some more artwork and as a result I kind of pulled ahead of the Spectrum programmer. Consequently, we actually ended up shipping the Amstrad version first," David explains.

THE DAVE-O-GRAPHY



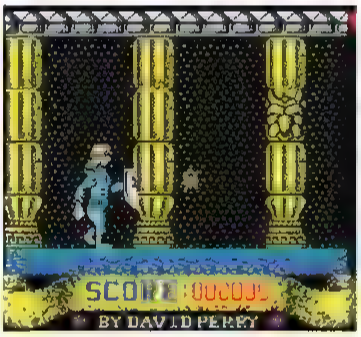
Herbert's Dummy Run

Herbert's Dummy Run was unfairly lambasted by many magazines of its day, with many reviewers declaring it the weakest of the five games in the *Wally* series. In hindsight, the criticism it received was a little unjust. *Herbert's Dummy Run* featured some superbly colourful and detailed visuals. And all of the many items that appeared in the game could be easily distinguished, with everything looking like it should. The game also boasts some inventive item-based puzzles, neat set pieces and even a *Breakout*-style mini-game: the blinkered muppets.



Three Weeks In Paradise

Released on two versions – a 48K version and spruced up 128K port – *Three Weeks In Paradise* was the final exploit for Mikro-Gen's mascot, Wally Week, and charts our intrepid hero as he embarks on the world's most dangerous busman's holiday. *Three Weeks In Paradise* quickly turned into three seconds for poor old Wally as his family were kidnapped by a hostile band of tribesmen in a remote chipper-looking paradise. Wally had to rely on his cunning, and love for the double entendre, to crack the various puzzles and save his family from getting a roasting.



Great Gurianos

Taito's *Great Gurianos* was an unusual, somewhat clunky take on the side-scrolling fighting genre. Playing a chunky gladiator-type character, you had to approach your opponents by negotiating a perilous tunnel loaded with traps, arrows and bats. To protect yourself you had to parry a continuous barrage of death with a rickety shield before engaging various gladiators in a one-on-one fight to the death. (Think *Tunnel B1* meets *Barbarian*.) Despite being unpopular in arcades, *Great Gurianos* was nonetheless a novel take on the fighting genre.

DEVELOPER LOOKBACK

The inlay card to Wally's *Pyjamarama* tries to explain and flesh out the madness.

Trantor marked the beginning of David and Nick's relationship; a working partnership that culminated in Shiny Entertainment as the pair continued to work together on further projects at Probe.

"At that time we were working on some fun games. We worked on *Smash TV*, *Savage* and *Dan Dare III* for Virgin. But *Dan Dare III* was the game that really opened the door to Virgin for us," David admits.

Dan Dare III began life as another game all together, one that he and Nick had been working on for Probe called '*Crazy Jet Racer*'. During its development David recalls that *Computer & Video Games* magazine would run an early preview on the game before it came to release, but after the *Dan Dare* deal landed on the pair's lap they also swapped the game's protagonist for Dan Dare.

After that they worked on a game called *Extreme* for a company called Digital Integration. "That was our last game on the Spectrum," says David. "It was us trying to show what you could do using all of the routines that we had made for all our games. And that didn't make it a better game by the way, because we had a gigantic robot walking sequence just to show that we could do line draws and full screen effects. We both relished the challenge of discovering new techniques and learning to push the hardware, so when the Amiga came along we were keen to get new hardware to experiment with, and see if we could get something running on it," says David.

"For whatever reason, at the time, I was playing around trying to draw circles." David remembers. "I soon found that if I ran them in a sequence I could make them look like stars rotating in 3D. It was a bit of a cheat but it looked like a little universe, so we then thought what if we have one guy positioned at the top of the screen and another at the bottom, and what if they could take over each other's planets and overthrow them? Then we wondered how you could fly between planets and the obvious answer was spacecrafts, and then later we thought about adding troops. We just continually got into these 'what if?' conversations and that's how we ended up making *Supremacy*."

At the dawn of the Nineties the Sega Mega Drive was released in the UK, and it seemed that Europe was finally sauntering towards console gaming. The Mega Drive is the machine that David is most synonymous with. But it was a programmer and hardware relationship that got off to a rocky start.

"We didn't have any tools, the manual was in Japanese and we knew it was going to be painful," he recalls. "We literally just struggled our way through. The first game we did for the machine was *The Terminator*. It was written so horribly because we had nothing to work with. But actually, by misreading the manual (because it was in Japanese), I found a way to double the throughput on the Mega Drive, and I was moving larger amounts of data faster than you were supposed to. The hardware wasn't supposed to be able to handle that, but it did, and anybody who was following the rules correctly wouldn't have tried it. And when I was doing *Aladdin*, *Cool Spot* and *Earthworm Jim*, I was taking full advantage of that."

Seeking a producer for *The Terminator*, David and Nick would be introduced to Neil Young, and his unique approach to producing immediately impressed David. "Neil blew me away as a producer," he admits. "He was just phenomenal. He was one of the first producers that would actually sit down, look at the game and say, 'What if you did it this way?', and it would be better than it was before. So imagine a creative producer, someone not trying to just ship the product but trying to make the best product possible, and having the

An unusual but rather memorable advert for *Savage*.

SHINY TIMELINE 1980-1991

1980 DAVID'S MUM BUYS HIM A ZX81 SETTING THE WHEELS IN MOTION FOR HIS PROLIFIC PROGRAMMING CAREER

1981 WITH COMPUTER GAMES ARCADE COMMODITY N DAVID'S HOME TOWNS OF DONEGORE AND TEMPLEPATRICK HE'S FORCED TO PUNCH OUT PROGRAM CODES INSIDE OLD COMPUTER MAGAZINES

1982 DAVID GETS HIS FIRST PAID GIG AFTER ONE OF HIS PROGRAMS IS PRINTED INSIDE A ZX81 COMPUTER MAGAZINE HE'S PAID £450 POUNDS FOR HIS EFFORTS

1983 DAVID WRITES HIS FIRST PROGRAMMING BOOK IT GOES ON TO SELL 8,000 COPIES

1984 DAVID SENDS UK PUBLISHER MIKRO-GEN A COPY OF HIS GAME DRAW MAZE IMPRESSED BY HIS EFFORTS THEY OFFER HIM A JOB AS A PROGRAMMER

1984 DAVE PERRY AND NICK BRUTY MEET AT PHOBI SOFTWARE WHILST WORKING TOGETHER ON TRANTOR THE LAST STORMTROOPER

1987 DAVID AND NICK RELEASE DAN DARE I, WHICH CATCHES THE EYE OF VIRGIN INTERACTIVE

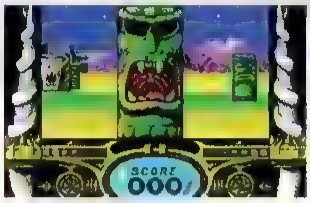
1991 THEY CONTINUE TO CREATE A SERIES OF HITS FOR VIRGIN, INCLUDING *SUPREMACY* AND THE *TERMINATOR*. DAVID'S FIRST MEGA DRIVE GAME.

1991 DAVID IS OFFERED A JOB BY VIRGIN INTERACTIVE TO MOVE TO AMERICA AND ASSIST THE COMPANY IN ITS US GAMING DIVISION.

THE DAVE-O-GRAPHY CONT...

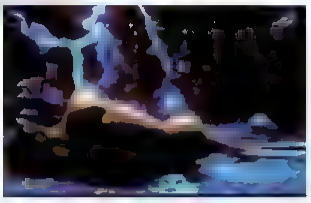
Trantor: The Last Stormtrooper

A gloomy, atmospheric and fantastically fleshed-out plot would find Trantor and his men sent on a mission to recover stolen missile plans from a remote hostile alien planet. After docking into the unknown, his ship blows up, killing Trantor's crew, and so, fully explaining the game's title. Left alone to complete his mission, Trantor is left thinking that things couldn't get any worse – well, that's before he remembers that he's been fitted with a ticking body bomb. Frequently having to stop at docking stations to reset your detonator, *Trantor* is a fantastic, and frantic, run-'n'-gun platformer that cleverly forces you to think on your back feet.



Savage

David admits that *Savage* was three games in one. To handle its huge size and amazing visuals, he had to make *Savage* multi-load so the Speccy could dedicate all of its processing power to each stage. The 3D section was made in homage to *3D Deathchase*. "We weren't just going to rip them off and make the same thing," says David. "We did bigger objects coming at you, which was a mistake because you don't get the same kind of throughput. The colour worked on a grid on the Speccy, and so unless everything moved eight pixels at a time there would be colour issues. So we came up with all sorts of tricks to try to smooth that out."



The Terminator

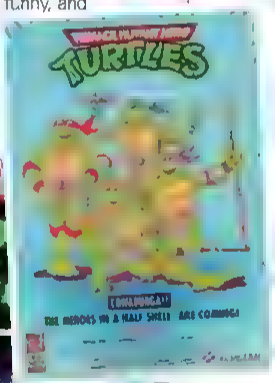
David's first title for Sega's Mega Drive plays it tremendously close to the film upon which it's based. Making full use of the extra throughput that David would tease from the Mega Drive, *The Terminator* stood out as one of the best-looking Mega Drive titles of its day. With photorealistic graphics and a fantastic cinematic soundtrack, its finish, in a solitary life gameplay – forcing you to familiarise yourself with the level layout and missions – held an incredibly compulsive draw. Unfortunately that meant when you finally managed to finish the game, it could be walked with both hands tied behind your back.

"WE WORKED ON SMASH TV, SAVAGE AND DAN DARE III. BUT DAN DARE III WAS THE GAME THAT OPENED THE DOOR TO VIRGIN FOR US"

creative opinions to back that up. That's what defined him."

Sticking closely to the events of the film, *The Terminator* stood out among other Mega Drive titles due to its striking photorealistic graphics. While you'd be forgiven for thinking that Orion Pictures had flown David, Nick and Neil over to the set to help them achieve such dazzling visual effects, the reality was a lot less glamorous.

"So we decided that we wanted to be the first game on the Genesis with photorealistic graphics and we said to ourselves, 'how could you do that?' And of course, the answer was to take a photograph, scan the photo, cut the background out, make a sprite and put the sprite into the game, as, sadly, there were no digital cameras in those days," David explains. "And so there we were standing in my mother's backyard. Nick is taking the photographs and Neil and I played the guys in the game. Neil had a trench coat, to play the role of Kyle Reese, and I was wearing one of my mother's jackets and playing the bad guys. Then we needed guns. Nowadays, you'd hire an armourer who would bring all kinds of guns and weapons to your set. In those days we were inside a shed, looking for anything gun-shaped. The pictures are really funny, and the sprites are lo-res, so you can't really tell, but I'm actually using a toilet plunger."



Following the release of *The Terminator*, Virgin Interactive asked David to fly over to America to help assist the company's development division. While his accepting of the job clearly proved to be the right decision – one that David admits he probably would have done a lot sooner in hindsight – the considered, analytic side of him seems to shudder at the thought of being so impulsive and not taking the time to fully weigh up the massive ask.

"You know when you're young you're naive, right? You never really put any thought into it, so I just got into a plane and flew out there, and didn't think twice about it," David recalls. "I literally put all my stuff inside two big chests. I bought them to put all my computers, all my discs, everything in these two chests, but then it turned out that I could only really fill up one with all my computer belongings. So I arrived at Los Angeles airport, and they're looking at me with these chests and they're like, 'What do you think you're doing? What's all this stuff?' And the guy opened up my case, but he opened up the wrong one. Inside were all various items including kites and juggling sticks. Slightly bemused, he was like, 'Okay, fine on you go'."

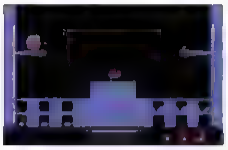
And so with David landing into more clement surroundings, it's here we end the first part of our Shiny origin story. Tales of annelids in spacesuits and Jim Dandy searching for Flange Orbits are still waiting to be told.

(Spectrum) *Paperboy 2* was an early game by David, but not one of his best.

TURN TO PAGE 52 FOR PART 2
TURN TO PAGE 52 FOR PART 2
TURN TO PAGE 52 FOR PART 2

SKY SKIPPER

A THRILLER WITH GORILLAS



PUBLISHER: PARKER BROTHERS
RELEASED: 1983
GENRE: ACTION
FEATURED HARDWARE: ATARI 2600
EXPECT TO PAY £10+

HISTORY

What do you get when you cross a biplane with *Donkey Kong*? We're not sure exactly either, but we'd hazard a guess that if this bizarre union ever did take place, Parker Brothers' wonderful *Sky Skipper* could have easily been the result

Taking on the role of a plucky pilot, your aim is to simply rescue a number of caged critters from a gorilla's enforced captivity. Now we've no idea why gorillas are enslaving other animals but hey, who are we to judge? We're just glad we get to enjoy such an enjoyably nutty game.

So anyway, sitting in your biplane, which has the handy ability to drop bombs, you need to fire yourself up with the gorilla overlords and drop your dangerous payloads on their heads. As soon as the great beasts are stunned, the captured animals will leap forth from their cages and you'll have a few precious seconds to capture as many as possible. Successfully clear a stage of all its imprisoned animals and you'll move on to the next, far tougher, screen.

The most impressive aspect of *Sky Skipper*, though, is just how polished it feels. There's a slickness to the 2600 game that you'd normally expect to find from Activision, while the simple yet oh so addictive gameplay constantly drags you back for one more go. Initially, the screens you have to negotiate are fairly straightforward, but as the stages progress, the layouts and gorilla placements become ever more perilous. It takes a huge amount of skill to weave your tiny plane through the ever narrowing nooks and crannies, and as the timer continues to count down you'll need amazingly quick reflexes in order to rescue every last trapped creature.

Never mind its functional looks and bleepy bloopy sound effects – although I love its opening at the start of each stage. *Sky Skipper* is an addictive little blaster that proves that it wasn't just Activision that could make amazing 2600 games.

F
1460

The Definitive BOULDER DASH

HERE AT **RETRO GAMER**, WE REALLY DIG OUR DEDICATED TRUTH-SEEKER **STUART CAMPBELL**. HE'S AN EARTHY FELLOW WHO CALLS A SPADE A SPADE, BUT THERE'S NOBODY BETTER AT DISHING THE DIRT ON THE SECRET HISTORY BEHIND CLASSIC GAME SERIES. SO STAND BY FOR A FIRM GROUNDING IN THE STORY OF ONE OF THE MOST LEGENDARY NAMES IN RETRO GAMING, AS HE RAISES A GLASS TO THE MIGHTY BOULDER DASH. HERE'S MUD IN YOUR EYE! *(PLEASE STOP – ED)*

B*oulder Dash* isn't only one of the most-ported videogames of all time (there have been official releases on almost 20 different formats, and that's not including the numerous mobile-phone titles, which we don't have room to go into here), it's also one of the most copied. A brief Google identifies almost 300 known clones, from faithful unofficial Windows ports of the original EGA PC version to obscure and curious remakes which use the *BD* rules and physics merely as jumping-off points to take the gameplay in all sorts of weird and extreme directions. So it's fitting that *Boulder Dash* itself is not only a bit of a clone, but a clone of one of the *least*-known games of all time. In an interview with a *Boulder Dash* fansite (www.boulder-dash.nl), author Peter Liepa described how he contacted a local game publisher looking for work, and:

"The publisher put me in touch with Chris Gray, who had submitted a game in BASIC, but didn't at the time have the skills to convert it into machine language. So this seemed like a good project to get my feet wet, and I sat down and got started. The game was similar to an arcade game called *The Pit*, but after examining it more I didn't think the game had any 'legs' – too much of it was predetermined. But I started playing with basic elements of dirt, rocks, and jewels and within a couple of days had built the basic 'physics engine' of what was to become *Boulder Dash*."

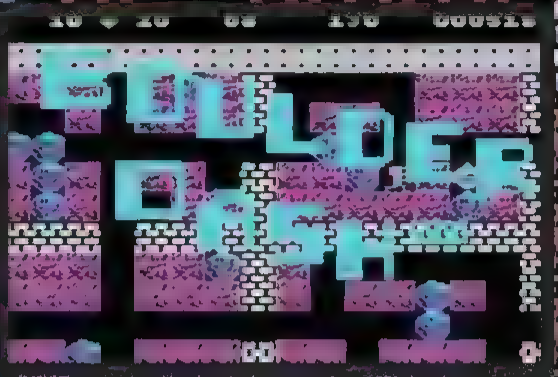
Alert readers will, of course, already recall **RG** issue 51's 'Families Reunited' feature, where we explored the influence of the long-forgotten *The Pit* in the development of *Boulder Dash* (and *Gran Turismo*), but it wasn't the basic scenario elements or the physics that would make *BD* one of the most loved and persistent franchises in the history of gaming. Rather, it was what Liepa did with that basic DNA that saw *Boulder Dash* achieve the sort of success and fame that *The Pit* could only dream of, and live on for the next 26 years and beyond. Join us over the next nine pages as we embark on an odyssey which, by the time you read it, will have whetted your appetite irresistibly for lovable hero Rockford...

1984

BOULDER DASH **(ATARI 800, SPECTRUM, C64, APPLE II, MS-DOS, COLECOVISION, AND MANY MORE)**

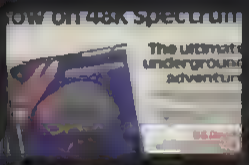
The Pit was a great little game, but it was very one-dimensional, a pure action game designed to separate arcade-goers from their money quickly by repeating the same two single-screen levels of obvious objectives and dangers over and over at ever-crazier speeds. *Boulder Dash* applied the core concept and physics to a set of 16 expansive scrolling stages (plus four bonus 'intermissions' where you could win an extra life), which largely threw away the action element altogether and replaced it with cerebral puzzling, where you had to manipulate a small set of objects to produce a solution in ways which you were left to work out for yourself.

Indeed, you could construct a pretty convincing argument that says *Boulder Dash* was the first 'sandbox' game, in that it was sometimes as much fun just to muck around and see what happened as it was to try to beat the levels. But even if you just went straight for the goal, you'd be there a long time – the normal 16 levels were tough enough, but the game also came with five difficulty settings, which completely changed the layout of objects within the caves, effectively making the game five times the size. Indeed, there's so much in *Boulder Dash* that it's a wonder anyone was ready for a sequel as soon as the next year.



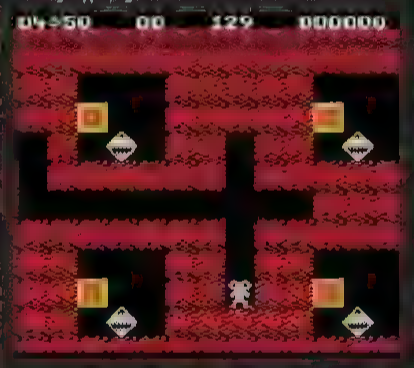
» [MSX] The most unique thing about the Japanese versions of *BD* is that when you get an extra life, instead of the classic 'twinkling passages' effect, the logo flashes on to the screen for a fraction of a second. Blink and you'll miss it, so we've preserved it here for posterity.

A ROCK AND A HARD PLACE



The Spectrum version of *Boulder Dash* was a decent port, albeit inferior to most of the others due to a significantly reduced screen area (16 blocks by 11, rather than the 20x12 of most other versions). But it wins one category hands down: most barefaced advertising lie of its generation. For some reason (quite possibly related to the screen-size difference), the poor old Speccy's scrolling couldn't keep up with Rockford's movement – if you kept running, he'd run right off the display altogether, disappearing into danger that you couldn't see until he stopped or encountered an obstacle that let the scrolling catch up. First Star spotted this problem before the game's release, but what to do? Fixing it might have been time-consuming and expensive, leaving it with a tricky decision to make. So instead, First Star decided, with considerable chutzpah, to turn it into a selling point.

"Superb scroll routine, described by experts as one of the best pieces of Spectrum programming ever!" trumpeted the very first line of the full-page ads in the games press, relegating the game's many other wonderful features and glowing reviews to mere supporting roles to a bug. The identity of these 'experts' was never revealed, nor their field of expertise, but it seems most likely that the field was sarcasm.



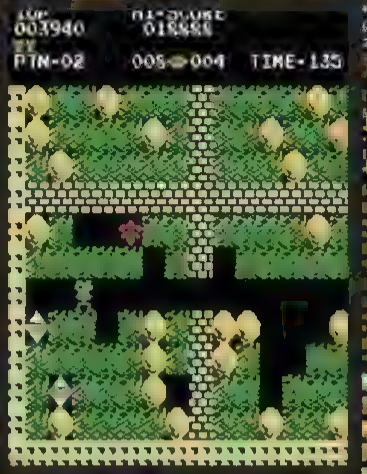
» [Spectrum] In fact, on the Spectrum you pretty much *have* to do this stage by playing while Rockford's off the screen.

The Definitive BOULDER DASH

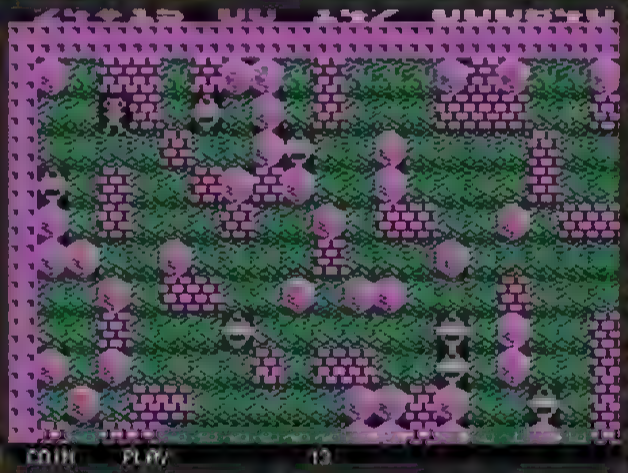
1984
BOULDER DASH (ARCADE)

Moving to arcades with incredible swiftness, the history of coin-op *Boulder Dash* is strange and confused. (*BD* ties with *Lode Runner* as the first game to appear in arcades after originating on a home computer. The Vectrex title *Cosmic Chasm* made the trip a year earlier, but that's a console game.) The first arcade *Boulder Dash* was released in 1984 by Exidy, via its 'Max-A-Flex' system, which was essentially an Atari 600XL in a cabinet, running games off cartridges which would also work in a bog-standard home-version Atari 800. The game, then, was almost identical to the original (even including the level select), but with one big difference – your coins only bought you time, in extremely stingy 30-second units. If you didn't feed it more *before* your time was up, your game was over regardless of whether you'd lost your lives or not (indeed, in 30 seconds it's barely possible to lose all your lives even if you try) – you don't even get a few seconds of grace to find some more money once the clock runs down.

Horrible time-limit coin-ops based on home hardware were a weird anomaly of the Eighties and Nineties – there were better-known versions based around the NES, Mega Drive and SNES as well as the Max-A-Flex, but the thoughtful, puzzly nature of *Boulder Dash* lent itself even less well to the concept than most games did.



[Arcade] Same levels, graphics, sounds being a pixel too small.



[Arcade] A rare example of an arcade game of the Eighties actually wider than most of its home-format counterparts.

1985
BOULDER DASH (ARCADE)

Fortunately, then, it was only a year before an entirely different coin-op version of *Boulder Dash* showed up. Data East's 'DECO Cassette System' hardware was one of the oddest things ever to appear in arcades – a tape-based format that took several minutes to load the games in every time the machine was switched off – but it offered developers a cheap way into the expensive market, and coder Comptiq (creator of the better of the two MSX versions) took advantage by putting together a nice enhanced-graphics version of the game. The abstract graphics for enemies like the Butterflies were replaced with proper insecty-looking ones, the boulders were smoother and more boulder-looking, and the colour palette was a lot livelier.

The most unusual thing about the DECO *Boulder Dash* is that it runs on a vertical monitor, rather than the horizontal aspect of the original home versions and the Exidy coin-op. The resulting space restrictions saw the display grid reduced to 15x12 – smaller even than the Speccy port – and some subtle and sneaky changes to level layouts at the same time (see the lower-right-hand compartments of Cave B for an example) meant that even experienced *Boulder Dash* players had to be careful as they made their way around the stages.

1985

BOULDER DASH II – ROCKFORD'S RIOT AKA ROCKFORD'S REVENGE AKA CHAMPION BOULDER DASH AKA SUPER BOULDER DASH (MULTIPLE FORMATS)

When making sequels to finely balanced, essentially simple games like *Boulder Dash*, it's important not to go overboard with new features, and *Rockford's Riot* didn't fall into that trap. (*Riot*, incidentally, was the name of the MSX version, while the C64 and PC had the '*Revenge*' suffix instead. The Spectrum version was reviewed and advertised with the '*Riot*' title, but the cassette inlay called it '*Revenge*'. The versions released for Japan-only computers like the PC-8801 and FM-7 went by the '*Champion*' name. Why do these people hate me so much?) There were only two new additions to the original formula – 'slime' walls that could hold diamonds and boulders up for a random amount of time, but which they'll eventually drop through, and expanding walls, which grew into any spaces you dig directly next to them, rendering them impassable once you moved away.

In 1986, Electronic Arts bought up the rights to the first two *Boulder Dash* games and sold them together in a two-for-the-price-of-one release called *Super Boulder Dash* on Commodore, Atari, Apple and PC formats. (In the strictest sense, *Super Boulder Dash* was the name of EA's release of the sequel, and *Boulder Dash 1* was simply a bonus freebie.) Which was nice of EA, even if it did apparently hate Speccy owners.

» [Spectrum] The original levels 1 cases are now starting to run through levels. Increasingly, every way into those closed-off caverns at the top left is a hellish job.

» [C64] See how long it takes you to pick out Rockford.

1986

BOULDER DASH 3 AKA PROFESSIONAL BOULDER DASH 3 (APPLE II, C64, SPECTRUM, PC)

Ironically, the next game in the series was a gigantically *un*professional mess-up. An ill-advised change to an 'outer-space' theme hacked fans off straight away, and an ugly, mostly monochrome colour scheme made things even worse. Piling on the misery, from the word 'go' the levels were joyless, pernickety chores, often based around split-second move-timing, which was a hideous nightmare to implement with the series' trademark sluggish and unreliable control response. Countless levels put you in positions where you'd have to spend several minutes setting up a situation, then execute a flawless close-quarters move to start it off, which was basically a coin-toss. Either the controls would let you get away with it, or you'd arbitrarily get exploded by a monster the instant you pressed the button and have to start the whole level all over again.

Compound these various disasters with bugs that made some of the levels uncompleteable and you end up with a total catastrophe. Interestingly, the only halfway-playable version of the game was a bootleg made for Commodore's *epic fail* machine the Plus/4, which hacked the levels into that machine's port of ordinary *Boulder Dash* and thereby at least solved the problem of the monochrome graphics making it hard to see what was happening.

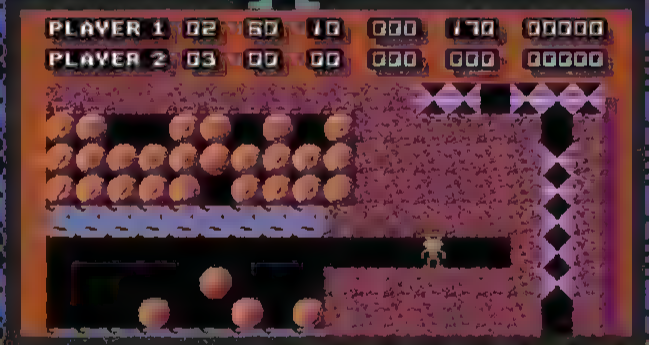
The Definitive BOULDER DASH

1986
BOULDER DASH CONSTRUCTION KIT AKA BOULDER DASH IV (APPLE II, ATARI 800, ATARI ST, SPECTRUM)

After the embarrassment that was *Boulder Dash 3*, First Star realised that it couldn't just go on punting out new level sets as full-price games, and finally made the *Construction Kit* available to the general public, along with another one-sixth of a sequel (12 pre-built stages and three intermissions rather than the usual 16+4, but also lacking the five difficulty settings of the previous games). The emphasis was placed differently according to which release you bought – the original cover art advertised *Boulder Dash Construction Kit* with no mention of there being any ready-made stages at all, whereas the Speccy budget re-release was titled *Boulder Dash IV – The Game*, with the inclusion of the level editor reduced to a little footnote at the bottom.

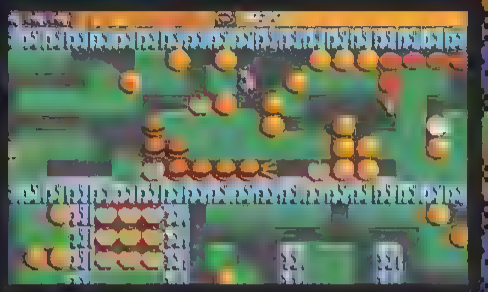
The latter approach is slightly odd, as this sequel was a release designed to actively encourage use of the level editor – because the built-in caves were among the most hateful, cheating *Boulder Dash* stages ever created. The first one in particular is so tedious and completely unfair that the game lets you choose any starting level (rather than the traditional format of letting you start on 1, 5, 9 or 12), presumably on the grounds that otherwise nobody would ever have seen the second, third and fourth caves, but the rest are barely any better, with much reliance on expanding walls to force the player into a miserable life of trial and error. In fact, the level design – fairly incredibly – manages to make *Boulder Dash 3* look like a loving, painstaking work of genius.

The construction kit itself, however, was comprehensive and easy to use, and would be the foundation for countless 'unofficial sequels' for years to come.



» [Atari ST] *Construction Kit* was the only one of the four original games to actually appear on a 16-bit format.

» [Amiga] The colours were somewhat garish, but *Rockford* is a lot of fun if you don't mind wearing shades while you play.



1988
ROCKFORD (AMIGA, ATARI ST, 8-BITS, ARCADE)

The short-lived Arcadia coin-op system of the late Eighties saw a clutch of UK computer games make the unusual trip from home formats to arcades, including *Road Wars*, *Xenon* and this. *Rockford* was the first *Boulder Dash* game to leave behind the generic caverns and put Rockford into a variety of settings, playing the role of a cowboy, spaceman, doctor, chef and explorer.

While in itself it's a pretty straightforward and rather fabby *BD* game – slick and fast moving, with an all-new engine for the first time in four years and five games – there are several weird things about *Rockford*. The Amiga version had an option for mouse control (which was fashionable at the time for action games, thankfully very briefly), and the Spectrum version came with a free game on the 'B-side' of the tape, in the form of *Rockman*. Despite the name it was a completely unrelated *Space Panic*-style platform game, which had previously been sold on its own as a £1.99 Mastertronic title. (The Atari 800 port came with an even more tenuous 'B-side' game called *Crystal Raider*, another unrelated Mastertronic platformer not dissimilar to the PC and Xbox Live Arcade game *N+*, and the C64's freebie abandoned even the slightest thematic connection to *Boulder Dash* with an arcade adventure called *Back To Reality*.)

None of this made *Rockford* the success it deserved to be, and it's still dismissed by hardcore *BD* fans as not being a 'true' *Boulder Dash*. But then, since when have hardcore fans of *anything* not been idiots?

1990
BOULDER DASH PART 2 AKA BOULDER DASH (ARCADE)

The name of this one's still a bit of a mystery. Absolutely everywhere you look on the internet you'll find it referred to by the unwieldy name '*Boulder Dash/Boulder Dash Part 2*', but there's no apparent evidence to call it anything other than *Boulder Dash*. That's certainly the name that appears on the title screen of both the Japanese and Western versions, and there's nothing on the credits screen or anywhere else to suggest otherwise. You would have to assume that the name came from *somewhere*, but this reporter has no idea where – there's no sign of the original game as an option, for example.

Anyway, this is a rather spiffy game (all-new, though versions of a few favourite levels make guest appearances) that's more in the vein of *Rockford* than the earlier titles, but zipped up even more for an arcade audience. Tricky situations can now be recovered through 'Escape mode', where holding down both fire buttons lets you smash through boulders, some sorts of walls, and out of sticky spider webs, at a cost of a loss of 20 seconds of the time limit. Also aiding your swift progress through the levels is the fact that although a stage is reset if you die, any diamonds collected are kept and count towards your total on the next try, and if you run out of time you have the option of sacrificing one of your lives to continue from the current point without starting the level again.

Part 2 – if that is indeed its name – is a highly entertaining game. It edges back towards the action bias of *The Pit* with its relentless pace and plentiful enemies, but it's still unmistakeably *Boulder Dash*.

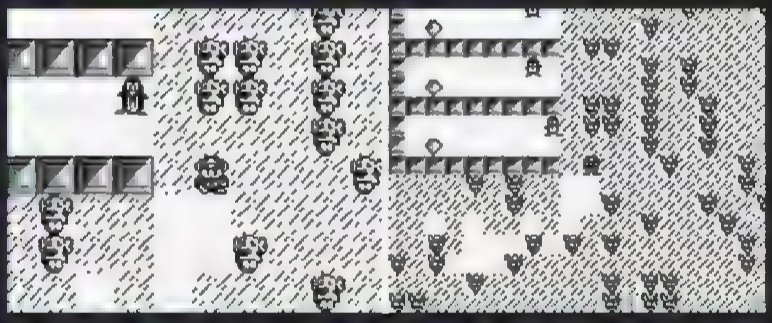
» [Arcade] The world's early [illegible] with leopard-skin [illegible]

1990
BOULDER DASH (GAME BOY)

They really knocked themselves out coming up with the titles, didn't they? To be fair, these next two 1990 releases (the GB version coded by 8-bit favourites Beam Software of *Horace/Exploding Fist/The Hobbit* fame) are basically ports of the original game at heart. The Game Boy one in particular is just the same 16 stages and four intermissions (including the selectable difficulty levels and entry points, though at the default setting the difficulty has been lowered by reducing the number of diamonds you need to exit each stage). You do, however, get music and cutesy graphics (a different visual theme for each of the four worlds) and a nice pause feature where you can stop and scroll around the map, either in the normal game view or in a zoomed-out view where you can see much more of the level. (Zoomed-out mode, which you can also play the game in, has a whopping 20x16 grid, bigger than any of the 8-bit versions, whereas the default mode is a quarter the size at 10x8.)

Unlike the computer versions, the scrolling is also fixed around your character's movement, so you never find yourself getting too close to unseen dangers at the edges of the screen. Add in far more responsive controls and a continue option that lets you carry on from the stage you last reached, and what you get is probably the definitive, most enjoyable version of the original *Boulder Dash*.

» [Game Boy] This is Cave E seen in both normal and zoomed-out.



The Definitive BOULDER DASH

1990
BOULDER DASH (NES)

This one gets its own entry because, while it's basically also a version of the original *BD*, there are quite a few fairly substantial differences in content and structure. The most obvious is that the NES game has two extra worlds on top of the four normal ones, although you lose the intermission mini-levels. Progression is totally different to previous versions, too – initially you can only start in the first world, though you can tackle each of the four stages within any world in any order you like. (As you play, you collect passwords that enable you to skip straight to later worlds – there's a so-called 'continue' option, but it sends you right back to the start of the current world.)

The five selectable difficulty levels for each cave have also disappeared, and in fact the only difficult level is considerably easier than even the lowest setting on the original game, because as with the GB version, the diamond requirements have been significantly lowered. On Cave D, for example, you can now head for the exit after collecting just 18 of a possible 36 diamonds, whereas the original demands all 36. Slightly compensating for that are tweaked level layouts (the layouts and diamond requirements are actually both taken straight from the DECO Cassette System arcade version, not all that surprisingly since the NES port was also made by Data East), but overall it's certainly an easier game despite lacking the responsiveness of the Game Boy's controls and the zoomed-out map option.

A curious omission, incidentally, is that neither of the Nintendo versions have a 'suicide' option, so be careful not to get yourself trapped somewhere you can't get killed or you'll have to hang around twiddling your thumbs until the time runs out.

» [NES] For those of you keeping track, the NES game has a 14x16 grid.

» [GBA] It would have been nice to have the option to play with slightly less twee graphics, but you can't have everything.

2002
BOULDER DASH EX (GAME BOY ADVANCE)

Having pretty much run out of formats to convert the original game to by now, and with the third and fourth titles too unpopular to be worth widely porting, the Nineties were a very quiet time for *Boulder Dash*, which was almost entirely bypassed by the 16-bit generation. It wasn't until the GBA appeared that the classic earth-digging format was revived, and it was revived in dramatic style with a radical overhaul that brought it – appropriately enough – right into the 21st Century.

Boulder Dash EX respectfully includes the original Atari 800 game (the *proper* original, with original graphics, layouts and diamond requirements, but with a GB-style map-scroll pause function to compensate for the smaller 12x10 grid and improved control response), but of far more interest is Kemco's updated version. For the first time, *Boulder Dash* featured power-ups, like pickaxes, which could smash a single boulder, bombs, and mysterious gravity-altering items which rotated the screen through 90 degrees, completely altering a level's layout and nature in an instant. Other major alterations included a life bar instead of instant death (a single rock to the head was still fatal, but enemies and falling diamonds only cause damage), the loss of being able to dig out/push the square next to you without moving (replaced by the ability to kick boulders long distances, *Bomberman*-style), and tragically, the disappearance of Rockford himself, replaced by an irritating generic pixie/elf/monkey thing.

From very early on, the stages get clever and cunning, and you'll have to get on top of the new physics and new abilities quickly. Everything is introduced carefully and gradually, but without intelligence-insulting tutorials talking you through it, and before you know it you're ensnared in a world of fiendish, brilliant puzzles. (Well, *five* worlds to be precise, each with ten puzzles. In a nice nod to the original game you can simply clear each stage with a minimum requirement, or you can beat them 'properly' by getting everything, for which you're rewarded with a special star on the map screen and a bonus collecting card.) If anything, it's perhaps just a tiny bit too easy, but otherwise this is one of the finest re-imaginings of an 8-bit classic ever.

2002
BOULDER DASH XMAS 2002 EDITION (PC)

2002's other *Boulder Dash* revival has already had praise lavished on it in the splendid 'Families Reunited' feature in RG 51. But it's well worth mentioning it again, because this is just a completely fantastic game, and by a mile the best in the series so far. Level design every bit as good as the GBA game but without the easiness issues. *Xmas 2002 Edition* will have you tearing your hair out, but is so good and so fair and so clever that you'll decide you looked better bald anyway. Perhaps benefiting from having years to come up with new stages, there's hardly a level here that isn't great, with even the gentle introductory levels offering enough of a challenge to cost you a few lives without cheating you (well, except maybe on 'Cramp', which is a little bit mean).

There's actually very little else to say about *Boulder Dash Xmas 2002 Edition*. It's much more of a straightforward 'classic' *Boulder Dash* than the frippery-laden *EX*, and the most innovative feature is the map structure, which both ensures that you're never stuck on a single level with nowhere else to go, and also gives you the chance to entirely bypass stages that you just can't do. It's typical of a game in which every last facet of the design appears to exist to increase the enjoyment of playing it, and you really ought to go and do just that.

▶ [PC] This early level, like numerous others in the game, gives away its trial-and-error nature by including a very easy-to-collect extra life in the bottom-left corner, because it knows you'll get killed over and over again by the fast-moving mummies until you luck into a successful attempt. There's just far too much stuff flying around to be able to plan a route.

▶ [PC] I hand *BDX2002E* so much that I messed it that deleted my save so I could start again, as I'd forgotten all the solutions.

2003
GEMJAM GOLD (PC)

A bit of an oddity here, as according to the credits screen *GemJam* "is based on" *Boulder Dash* and is licensed by First Star, but it doesn't carry the *BD* name and Rockford has again been replaced by the little blue dragon first seen in *Xmas 2002 Edition*, severing the last obvious visible link. So, an illegitimate half-brother to the rest of the series, maybe, but in every identifiable sense it belongs just as much as the others, so we'll include it here anyway. It's built very much to the same template as *Boulder Dash Xmas 2002 Edition* and has slightly more levels and variation (60 stages in four different graphical styles, rather than 50 all in the same style), but it gives the impression of having been rushed out to capitalise on the success of the earlier game, and the levels simply aren't nearly as well-designed.

There's far too much running around in a random panic amid hordes of enemies all bouncing off each other, huge piles of unpredictable boulders that you have to bludgeon through by trial and error rather than carefully working out your strategy in advance, sneaky exit positioning, and suchlike, for this to be half as enjoyable as its predecessor. Where *Xmas 2002* was a mostly cerebral challenge with occasional bursts of action-based bits to break it up a little, the balance in *GemJam* is tilted more towards knockabout slapstick farce and explosions – still fun if you enjoy that sort of thing, but much less compelling because too often you feel your fate wasn't really in your own hands. And the music's pretty annoying, too.

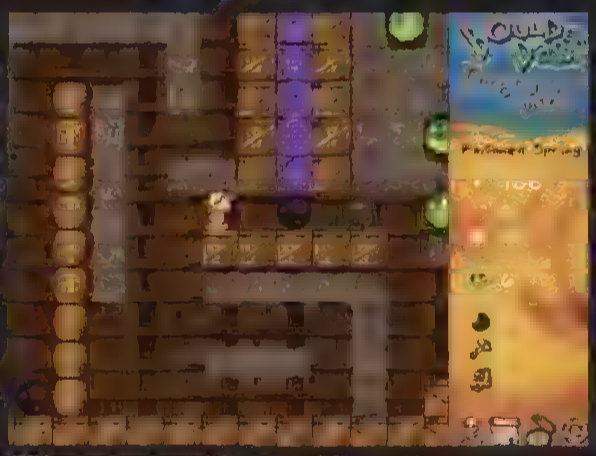
The Definitive BOULDER DASH

2003
BOULDER DASH – TREASURE PLEASURE (PC)

After the disappointment that was *GemJam*, at least FlyOrDie didn't just give up. It had another go right away, and the next 'proper' *Boulder Dash* game (released the same year) was a much stronger effort. Reverting to much more classic strategy-puzzle-oriented level design reintroduced skill and thought to the game and made it much more fun and addictive. (Check out 'Pearls' and compare it to the superficially very similar level 'Landslide' in *GemJam* to see how much more enjoyable you can make a stage with just a single rule change.) Navigating the game's pirate treasure map is also a pleasure, enabling the skipping past of lots of rather over-easy stages before the real brainteasers nearer the end. *Boulder Dash – Treasure Pleasure* is quite a bit less challenging than its two predecessors, and while they all have the same map structure, *TP* has a lot more levels that appear to be aimed at younger players, which grown-up *BD* fans won't want to bother with. (Or maybe I've just been playing so many *Boulder Dash* games this month that I'm getting too good.)

Unfortunately, it also employs a controls-reversing pick-up as an active gameplay feature, for which we have to dock it nine trillion points and with a heavy heart have everyone involved in its development and publishing brutally killed with broken-glass covered hammers. Ooh, so close.

» [Atari 5200] If it gets finished, VCS *Boulder Dash* looks like it could well be the most technically accomplished creation the console has ever seen.



» [PC] A scattering from the various types of world in *Boulder Dash – Treasure Pleasure*.

ROCKS OF AGES

One of the odder current phenomena relating to *Boulder Dash* is the sudden upsurge in versions for ancient Atari console systems. 2006 saw both *Boulder Dash* and *Boulder Dash II* get officially licenced releases on cartridge for the extremely obscure and unsuccessful Atari 5200, coded by Mean Hamster Software. Weirder still, there's a splendid-looking port being made for the 5200's better-known predecessor the VCS. Coded by Andrew Davie, it isn't finished yet, but you can find scores of videos of it in action on YouTube (search for '2600 boulder'). It's currently slated to come out at the end of this year, hopefully again with official approval from First Star, so keep your eyes peeled for that one.

2007
BOULDER DASH: ROCKS! (PSP, DS)

We're arriving at the final entry slightly sooner than planned, because First Star spent much of the time after *Treasure Pleasure* advertising the next game in the PC series, to be called *Boulder Dash: The Guardian Quest* and slated for release in 2006. The game was developed to an advanced state, with several worlds of several levels each and a two-player 'party mode', and looked lots of fun, but was suddenly and bafflingly canned in order for First Star to concentrate on this DS and PSP release instead. (And it has stayed canned despite the company making a new PC sequel for later this year.) With the benefit of hindsight, that looks like quite a bad move.

It's not that *Rocks!* is completely terrible. It's pretty, it's got lots of inventive additions to the basic formula (including some rather good boss levels), and some interesting new gameplay modes (though most of them are annoyingly locked at the start). It's just that the main game has been designed by someone with no instinctive grasp of how either *Boulder Dash* or pure puzzle games (which is what *Rocks!* wants to be at heart) work.

The screen is zoomed in more than any other *Boulder Dash* game (just 11x8 blocks on the DS, despite a second screen going basically unused), which allows for some cute, characterful graphics, but – crucially in a game of this nature – *doesn't let you see where the hell you're going*. (Bizarrely, the PSP version, which appears to have a bigger grid, isn't due out for months yet, although UK mags reviewed it as far back as January.)

[PSP] You'll soon get to use the jetpack, tragically.

Far too many times you'll have to (for example) charge down a vertical tunnel with three exits, with a boulder falling down on top of you, but you can't see far enough ahead to tell which way you need to turn, or what might be waiting for you. Make the wrong move and you'll be trapped in a dead end or smushed by a monster, with no option but to restart the level, through no fault of your own. It gets even worse later on, when the game has the dreadful idea of introducing teleports.

You can find yourself in a screen with two different teleports, neither of whose exits are visible, where you simply have to pick one and hope it was the right choice. If you're lucky, the consequence of the wrong choice will be simply wasting time, but that's a disaster in its own right because the game's other worst feature is that levels have arbitrary and incredibly tight time limits whereby almost any departure from the level's one pre-defined solution will result in you running out of time.

In essence, *Rocks!* is the *Rick Dangerous* of *Boulder Dash* games – a gruelling slog of trial and error, having to randomly guess your way through every claustrophobic, maze-like level (there are none of *BD*'s trademark wide-open caves here), repeatedly get killed, and then remember where you guessed wrong until you eventually get to the end without ever having employed any skill or independent strategy, which is rather unrewarding and not really what *Boulder Dash* has always been about. And all that's assuming that you haven't smashed your handheld to pieces inside an hour as a result of the game's *incredibly* infuriating insistence on stopping every five seconds to explain each of the level's features to you, even when you're on your 20th attempt in a row and *know perfectly well how the dynamite works, you ridiculously irritating fo-!* (Medicine time! Uncle Stu will see you all next time, readers! – Ed)

[PSP] Every one of those '?' squares will result in the game stopping and telling you stuff that in all probability it told you at the start of the level anyway. And if you finish a level with any 'Boulder' diamonds remaining, the game will say 'Told you, pussy', which is pretty much what it does.

DEVELOPER LOOKBACK

THE TALE OF SHINY IS REMARKABLY MELANCHOLIC. IN THE MID TO LATE-NINETIES DAVID PERRY'S TEAM WENT FROM MAVERICK GAME STUDIO TO ONE OF THE MOST EXCITING DEVELOPERS IN THE WORLD. SHINY PUSHED ENVELOPES, TECHNOLOGY AND IMAGINATIONS TO BREAKING POINT, BUT WHILE ITS TALENTS BROUGHT IT SUCCESS AND NOTORIETY, IT WOULD ULTIMATELY ALSO LEAD TO ITS FRACTURE

Shiny Entertainment (Part 2)

Shiny founder David Perry

No sooner had the jet lag dispersed, David was assigned his first game for Virgin. *Global Gladiators* was an 'advert game' for McDonalds, but with a casual anti-pollution message. For the game's development Virgin took the decision to use the bones of another platform game that it already had in development, called *Mick & Mack*, but McDonalds had other ideas.

"I remember this big McDonalds executive in my office, very unhappy because you couldn't buy burgers and fries in the game. We were like, 'what?' No one wants to stand at a counter buying fake burgers and fries that they can't eat in the game. What we did instead was put Ronald McDonald at the very end of the level, waving a chequered flag, somehow that made him happy, and we shipped it," recalls David.

Global Gladiators was awarded 'Game of the Year' by Sega, and garnered rave reviews from many Sega magazines of the day. Impressed by the game's success, Sega contacted David's publisher Virgin wanting to partner with their rights to 7 Up's Cool Spot character, and asked whether his team would be interested in helping the company make a game using the property.

"After *Cool Spot*, Sega came back to us and said they had the rights to *Aladdin*," says David. "I guess Disney wasn't approving whatever progress was being made. So I got to meet with the President of Sega (Tom Kalinske) and I remember sitting in his office 100 days before it was due to ship. My team kicked butt, buried with assets, I literally had to sleep in my car to get the game finished at Virgin, it was just exhausting, but we ended up shipping on time. *Aladdin* was a really good thing for us because it was the first time that movie directors had actually got involved in the creation of a game. Disney Feature Animations were animation gods at that

PS2] A clip of the infamous girl-on-girl kiss scene exclusively shot for Shiny's *Enter The Matrix* (easy boys)

WHERE ARE THEY NOW?

At the time that Shiny was readying the change from 2D to 3D it lost quite a few members of its original team. Doug TenNapel and Mike Dietz left to start up the game studio The Neverhood. Like Shiny, Neverhood's projects all took an innovative approach to game design. Its first game, *The Neverhood*, was the first videogame constructed entirely with clay animation. After releasing two further games – *SkullMonkeys* and *Boombots* – the company dissolved. Doug TenNapel went on to become a writer for Nickelodeon and Mike Dietz still works in the industry as a freelance animator.

Shiny's affiliation with Hollywood eventually saw Christian Laursen write, direct and shoot his own film, and level designer Tom Tanaka and character designer Kevin Monroe work together on the CG *TMNT* movie, released last year, with Kevin actually writing and directing the movie. Nick Jones, who programmed the SNES version of *Earthworm Jim*, now works for 2K Games developing its successful 2K Sports series.

Soon after the release of *MDK*, Nick Bruty, Bob Stevenson and Andy Astor formed their own studio called Planet Moon Studios. The company went on to make the games *Giants: Citizen Kabuto*, *Armed And Dangerous* and *After Burner: Black Falcon*. Sadly, Andy tragically died of cancer and Bob has started a new iPhone game publishing company called NGMOCO.

A rare shot of Shiny's Laguna Beach offices.

[PS2] *R/C Stunt Copter*. Not quite what David had in mind, but still good fun.

time, we'd carefully handle each frame they drew for us, scan it, colour it (section by section) and test it in the engine. That's how we did the frames for *Aladdin*, but that meant it all had to be tracked, every piece of paper, because the individual frames were so valuable to Disney.

"At the time I was already working on the prototype of *Jungle Book*," continues David. "We had an artist called Christian Laursen and he blew my mind, the backgrounds he was generating were stunning, and the Mowgli animation was done by Mike Dietz – again, I'd never seen such great game animation. So basically we had this great *Jungle Book* game on the way but we raided the team and some ideas to make *Aladdin*. It was at that time that Virgin asked me to wrap up *Jungle Book*, but we had borrowed a lot from *Jungle Book* so we really needed to restart. Virgin/Sega sold over a hundred million dollars of *Aladdin* games, and it was then I started thinking to myself, 'maybe it's time to start my own company'."

And fate stepped in when David received two job offers.

"Sega's Roger Hector asked me to be the CTO (chief technical officer) of the Sega Technical Institute, which I had not heard of before," he explains. "It was this office that was doing all kinds of advanced R&D for Sega. The job would have meant that all of their developers would have reported to me, so I would have been Yuji Naka's boss, which I found highly amusing as I thought he was a superstar. I wasn't that interested in the job but I was really interested in meeting him, so I interviewed for the job."

David was then asked if he would head up game development for Playmates Toys who, after making a billion dollars from the Ninja Turtle toys, was eager to enter the game space. David declined Playmates' offer but came back with a deal of his own, if Playmates agreed to fund his own development studio, in return it would have the exclusive rights to the studio's first three games. Playmates crunched the numbers and then lent David $3 million to start up Shiny, and he set about hiring his favourite people from within the industry.

"The 'yes' came too quickly," remembers David, "we hadn't any plan of what we were going to make. Playmates suggested we make a game starring one of their characters so we sat down and the team were looking at all these different properties. But there was no real excitement among my team members think that privately we wanted to make something original, but because we were working with a big company we had to take the time to consider all the options."

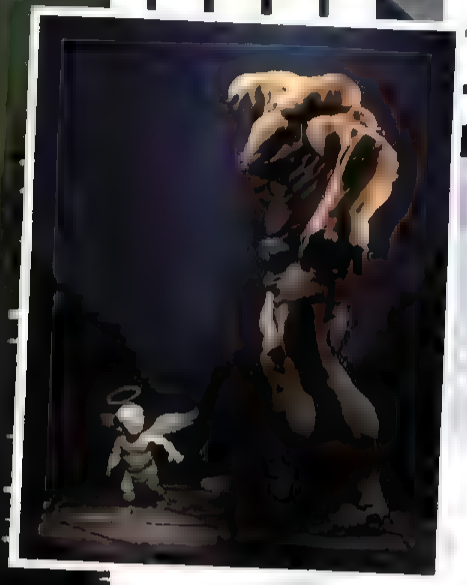
It was then that a few members of David's team suggested that he hire animator Doug TenNapel. Doug was working on a *Jurassic Park* game for Dreamworks Interactive at the time. David agreed to hire him if he passed a character animation test, and Doug ended up demoing the first walk cycle of Earthworm Jim. "I liked his work, but I saw huge potential in the character," David recalls. "I ended up betting the company on it. Oh, and of course Doug got the job."

"If you go to a Hollywood studio and try to get them to look at your property it's quite difficult. But because I was the 'game guy' they were happy to hear my opinion on their properties," says David. "So I would meet with Sony, Warner or Universal, and listen to their ideas before I'd say, 'Would you like to see something that I think might make a good movie but is going to be a good videogame?' And invariably they said, 'Sure, let me have a look'. So I pulled *Earthworm Jim* out of my bag and I showed it to the head of licensing for Universal Cartoon Studios, and he loved it, so did Warner Kids Network."

With interest from both Universal and Playmates the press soon grew very excited, and Shiny and Jim would find themselves splashed across many magazine covers. And the marketing maelstrom didn't settle. Never before had a development studio licensed out as aggressively as Shiny. Soon there were

Jim's face was splashed pretty much everywhere, from toys to lunchboxes and even on Y-fronts (quite probably).

DEVELOPER LOOKBACK

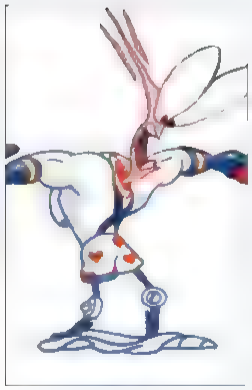


Shiny was originally toying with the idea of having the final Sinistar boss in *Path Of Neo* take the form of a giant Godzilla-type monster

Earthworm Jim Halloween masks, bed sheets, underpants, a TV show and even a Marvel comic book.

"I remember going to see Sega with *Earthworm Jim*," says David. "I went to see the VP of acquisitions at Sega, Chris Garske, and I go into their office in San Francisco, with the head of Playmates, and he sat us down and started explaining to me how difficult it was to publish on the Genesis (Mega Drive), and that we couldn't be guaranteed slots any more, kind of preparing me for the worst. So we sit through this whole thing and I pull out the game and demonstrated it to them. Let's just say it was a day and night conversation once he saw all the game running live, all the doors swung open."

Shiny immediately began work on an *Earthworm Jim* sequel, but a potential disaster was looming on the horizon. The industry was sauntering towards 3D gaming and David was faced with a tough decision. Shiny had amassed a team of talented 2D artists; some of the best in the business, and in a relatively short period had refined its unique brand of 2D technology – which it called 'Animotion'. But it was clear the industry was leaning towards three-dimensional gaming, so David eventually accepted the inevitable, and began researching and recruiting 3D experts and investing his own money on new equipment.



Some concept art of Jim caught with his trousers down

"The mistake I made was I was hiring people who were experts in that field not people who were interested in games," admits David. "I was also buying very expensive Silicon Graphics computers, too. It was like $25,000 per computer and the software was $25,000, plus you had to pay subscription fees, which were something like $10,000. So I'm writing these cheques and I'm hiring in people that I know don't even like the games we're working on, and the original team didn't like it and it caused a big rift. That was around the time that Interplay came along and wanted to buy Shiny."

Interplay's interest in Shiny came about when it licensed *Earthworm Jim Special Edition* on the Sega CD.

"*Earthworm Jim Special Edition* was a much better deal for us than it was for Interplay, and I think they kind of liked that experience; they knew we were really pretty serious," says David. "I was just looking at the whole thing thinking that this was a great time to get out, so I sold the company to Interplay and then (don't) my team turned out to be great at 3D. Once they applied themselves and started really working on it. In the actual sale, the deal nearly fell through over the last $10,000. We couldn't work it out. So, being gamers, we decided to bet it on a game of pool. And I nearly won that damn game of pool!"

"We had a programmer called Andy Astor, and Andy was my tools guy. When we were making *Earthworm Jim* he was making the tools, and on *Earthworm Jim 2* he started to write game code as well. By *Earthworm Jim Special Edition* he handled the conversion by himself, but we didn't realise his true powers. He was convinced he could do 3D and so put together a 3D engine, completely from scratch by himself. So we ended up getting him a support programmer called Martin Brownlow."

Playmates then asked Shiny to deliver it another big game, one to match the success of *Earthworm Jim*, and that's when the team pitched *MDK*. But Playmates had its reservations about the appeal of the game.

"We had all these storyboards explaining how the first ever videogame sniper rifle would have worked, but they just weren't interested," says David. "So Nick Bruty and Bob Stevenson sat down with a 3D package (3D Studio) and rendered the whole thing out in 3D, using the storyboards that we had. We asked Playmates for a second meeting, played them the video and they got terribly excited. They were like, 'Oh my god, this is great!' They wanted to make toys, get a television show going, the same story again.'

With the game under way, David approached Canadian CG animation studio Mainframe Entertainment to get an *MDK*

If you need any reason to play *Sacrifice*, run your eyes over these scores.

Shiny's plush-looking Newport retreat, unfortunately it came with an annoying red arrow protruding from the roof.

THE DAVE-O-GRAPHY

Global Gladiators

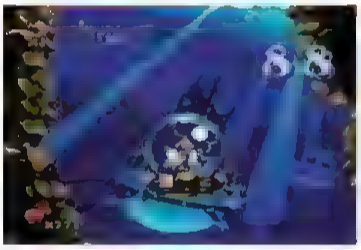
Kids love videogames, kids love McDonalds and kids love saving the planet apparently) *Global Gladiators* boasted great design, fluid animation and a fantastic musical score written by Tommy Tallarico, which used real instrument samples – a first for a videogame. It was heralded as a triumph upon its release, and quickly brought David to the attention of Sega after it won Game of the Year

Cool Spot

In the Nineties soft drinks giant 7 Up figured it would take the red full stop nestled between the '7' and 'Up' inside their logo, and turn it into a mascot – cue Cool Spot. The game was praised for its glorious and smooth-looking visuals and was hailed as being one of the best-looking games on the Mega Drive. Gameplay-wise it would be fair to say that *Cool Spot* is actually identical to *Global Gladiators*: bound and blast collect-a-thon action.

Disney's Aladdin

Aladdin was so popular on its release that the hype surrounding the game came to stifle the impact of *Street Fighter II*'s late appearance on the Mega Drive. *Aladdin*'s bright and buoyant visuals captured Disney's eye-watering visuals brilliantly, and Tommy Tallarico was back again doing brilliant things with the game's score, adapting several compositions from the movie using real instrument samples.



Earthworm Jim

Based on a creation by Doug TenNapel, it was a worm wearing a spacesuit that Shiny would select as its first project. It was a good call, as it turned Shiny into one of the industry's most exciting developers almost overnight. *Earthworm Jim*'s sense of humour, quirky characters and run-'n'-gun action quickly found Jim worming his way into the hearts and minds of Mega Drive owners the world over.

te evision show off the ground. Mainframe created the kids' computer-generated te evision show *ReBoot* and David wanted CG for *MDK*. So he went to Canada and pitched the Mainframe team the idea, and they agreed to make the show.

"It was the same story again, we had the toys, we had the TV show," he explains. "So we had a meeting at Interplay, and you have to remember that I don't own the company any more – this is where I started to regret my decision. We had the deposit cheque to get the whole thing rolling from the toy company and basically it was the signing meeting. So we're all waiting for the celebration drink and then the President of Interplay (out of the blue) decided not to sign the deal. He thought, 'why am I going through all these people, why can't we do all of this ourselves?' It was the most frustrating meeting of my life. To have a te evision show lined up, a toy line lined up – and I knew that once you get those two everything else comes with it, we would have had comic books and videotapes and everything else, it all just collapsed in one meeting for no good reason. It was a dumb decision, and so the whole thing fell apart on me."

Frustrated, David and his team continued with *MDK*, and the game proved another huge success for Shiny and Playmates, further enforcing Shiny's reputation for delivering innovative and exciting videogames and finally coming to end its licence agreement. It was then Interplay would begin farming out sequels to Shiny's properties. It made another *Earthworm Jim* game with Crave, *Earthworm Jim 3D* with Scottish developer VIS Entertainment, and then handed the *MDK* reigns over to RPG stalwarts BioWare.

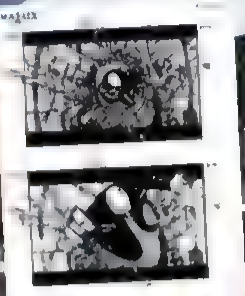
"We didn't really want to get involved," says David. "I think what we would have done was shelved them, and done what Blizzard does and do a property then leave it alone for a while. At that time I was responsible for the budgets. The way videogame studios work is you have this certain amount of overhead and if you have one game, it has to carry it all on its back, so I, in my infinite wisdom, decided to start four games at once, which was just the most stupid move ever."

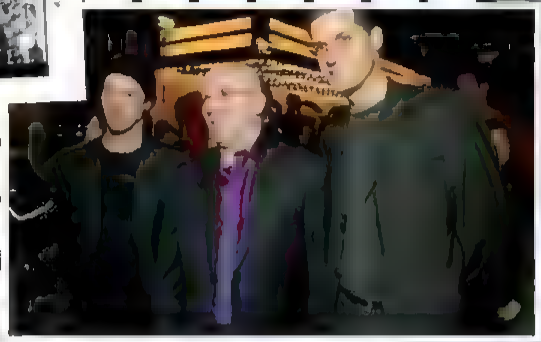
The four games the team began working on were *Sacrifice*, *Messiah*, *Wild 9* and *Stunt Copter*, but the mammoth undertaking of working four projects soon took its toll on the team. "Talent was spread thin, and we were so out of space you couldn't get a credit card between people in the office," remembers David. "We were making a model helicopter game because I liked model helicopters, *Messiah* was a game where we were trying to get across the idea of possession, and it used a new tessellation technology that had not been seen before. And then *Sacrifice* started after that and used the *Messiah* engine, on steroids. *Wild 9* was a game where I had this idea about being able to grab your enemy and manipulate them, forcing them into the traps they set for you. All the games had a reason why I wanted to make them, but we never had the bandwidth to handle four games, and it created four factions in the company, which wasn't really what Shiny was all about. It was a very difficult time."

Despite the mounting pressure within Shiny, *Messiah* did have some cool tech, *Sacrifice* became one of the highest rated real-time strategy games ever, and *Wild 9* was licensed by Sony in Japan and had plenty of fans, but the games just weren't big sellers for Interplay.

"Our helicopter game was based on flying model helicopters," says David. "When you fly a model helicopter for real you're scared of breaking it, so you end up kind of just setting it on the grass and

DEVELOPER LOOKBACK





David (on the right) walks the red carpet with Keanu Reeves (on the left).

trying to lift it up an inch off the ground and set it back down. What's interesting is you start to challenge yourself mentally to see what you're capable of doing, you keep giving yourself incrementally more complicated goals. So we made this prototype and there was no game, but it was really surprisingly addictive and I decided to fund it. Our intention was to sell it as cheap as possible on the PlayStation, but Interplay didn't want it (too risky). So I pitched it to Midway, they liked it and we did the deal with them, they then turned it into a different game (big and complicated), I stepped out of the project, Interplay took it back and shipped it."

The game did okay, and found fans, particularly among helicopter enthusiasts, but it didn't become the huge pick up and play sandbox phenomenon that David and his team felt it potentially could have been. But there was no time for David to stew over the changes as he and his team began work on *Enter The Matrix*.

"The Wachowski Brothers really liked the *Messiah* technology – I think they were fans of *MDK*, too," admits David. "I was asked to come to Joel Silver's offices and meet the directors. So I did and they pitched me the first *Matrix* movie. They had a lot of storyboards and a video of a barrel of fire burning in slow motion. I didn't realise it at the time but what they were demonstrating to me was bullet time. Because we were deep into *Sacrifice* at the time I actually passed on it (laughs). And then I went to the first *Matrix* movie and just wanted to smash my head into the wall. They then called me up after the movie and asked if I'd seen the film, and would we like to do *Matrix Reloaded*? And of course the answer was, 'hell, yes'! They really wanted to try to break new ground by making the movies and the games work together. They said we could use all of the actors and all of the music, they would write a brand new story and shoot the actors acting it out. It was pretty exciting, as you can imagine.

"The problem was ultimately we had big grandiose plans for the game but getting it all in was proving to be very difficult," David continues. "There were just so many technical issues and problems along the way. I couldn't feel bad about it but it just made it quite difficult and everyone did their best. And then we had some crazy stuff happen to us, we actually got evicted from our building. Our lease was about to expire and our landlord asked me if we would be extending the lease? Well, by that point we had so many people working for us the place was packed (so we really had to plan to leave), so I asked if we could go month to month and pay until the project was completed. He said he knew I'd say that, and that he had already signed a deal with someone else. We had to be out in three months. We had about five to six months left to go on the *Matrix* project, so the timing couldn't have been worse."

In spite of this, *Enter The Matrix* still turned out to be a huge success for Atari, and resulted in the company purchasing Shiny from Interplay for $47 million.

"They ended up making hundreds of millions of dollars, so it was a pretty good deal for them," says David. "It was then we began working on *Path Of Neo*. We also got the best offices that we could imagine, Atari spared no expense. We ended up with custom-built offices right over the water, boats parked against the windows in Newport Beach, Southern California, and it was really great for us. But Atari was starting to run out of money."

Now a tendril of Atari, Shiny began looking for its next project. And David decided to look up some old friends.

"Atari were very interested in doing another *Earthworm Jim* game so I decided to reform the original *Earthworm Jim* team. I called them up and we all met at the Shiny offices and agreed to start the team again.

SHINY TIMELINE 1991-2008

1991 DAVID BEGINS WORKING ON HIS FIRST GAME FOR VIRGIN, THE MCDONALDS AD GAME GLOBAL GLADIATORS.

1992 DAVID IS APPROACHED BY SEGA AND ASKED IF HE COULD DEVELOP THE COMPANY A GAME USING THE 7UP LICENCE AND ITS COOL SPOT CHARACTER.

1993 FOLLOWING THE SUCCESS OF COOL SPOT, SEGA ASKS DAVID TO WORK ON THE VIDEOGAME TIE-IN FOR *ALADDIN* ON THE MEGA DRIVE. IT'S A HUGE SUCCESS.

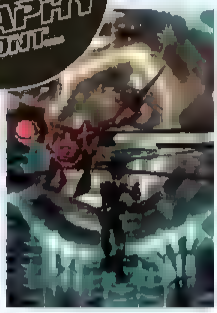
1993 DAVID IS OFFERED A JOB TO BECOME THE CTO OF THE SEGA TECHNICAL INSTITUTE. HE INTERVIEWS FOR THE JOB BUT TURNS IT DOWN.

1993 PLAYMATES TOYS ASKS DAVID TO HELP BREAK INTO THE VIDEOGAME MARKET. HE DECLINES THE JOB BUT INSTEAD ASKS PLAYMATES TO HELP HIM FUND SHINY ENTERTAINMENT, AND IT AGREES.

1993 DAVID HIRES DOUG TENNAPEL AND SHINY BEGINS TRANSFORMING *EARTHWORM JIM* INTO A VIDEOGAME.

1994 SHINY BEGINS WORKING ON *EARTHWORM JIM 2*. *JIM'S SEQUEL* WOULD BE THE LAST GAME THAT DAVID AND CO DEVELOPED FOR SHINY AS HE DECIDES TO FOCUS HIS ATTENTIONS MORE TOWARDS THE RUNNING OF THE COMPANY.

THE DAVE-O-GRAPHY CONT...



MDK

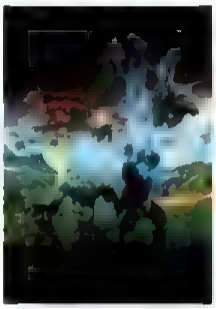
Murder Death Kill? Max, Dr Fluke Kurt? Mrs Donkey Kong? Regardless of what you may have interpreted those three letters to stand for for those gamers who were lucky enough to experience Shiny's first foray into three-dimensional gaming one thing was universal. *MDK* was a staggering game. Every element seemed to be meticulously crafted. *MDK*'s alluring Gothic imagery great humour and brilliant story were based entirely around artist Nick Bruty's idea of being able to shoot someone in a videogame with a sniper rifle, and the industry was never quite the same again.

Messiah

Messiah proved to be yet another dark, melancholic hit for Shiny and David Perry that was built around the notion of possession inside a videogame. Built using a dazzling new third-person three-dimensional engine, *Messiah* saw the player taking on the role of a cute cherub called Bob who has been asked by God to destroy mankind after we nark him off by dabbling in superhuman genetics (never a good idea). However, Bob goes against his master's wishes when he finds out that Satan is pulling the strings of corruption, and plots to put an end to his nefarious ways.

Sacrifice

Built using a refined *Messiah* engine, *Sacrifice* is often heralded as one of the finest PC real-time strategy games ever created. It's a real shame that so few people have been fortunate enough to venture into the enticing world of *Sacrifice* as it's a truly sublime game. *Sacrifice*'s genre-busting freeform approach to its gameplay, resource gathering, whimsical spells and trademark Shiny sense of humour really struck a chord with PC gamers the world over. If we were ever to run a top-25 misplayed videogame gems, it's highly probable that *Sacrifice* would sit at the top.



The Matrix

The Matrix Revolutions and *Path Of Neo* were both heavily criticised for failing to live up to expectations. However, you do get a sense that there was a great deal of bandwagon-jumping going on by the press upon the games' releases, and the vitriol they received was a tad unjust. They're only bad games by comparison to the brilliance of *MDK*, or *Sacrifice*. As far as movie tie-ins go, they were both innovative, captured the spirit of the films brilliantly and offered a silly amount of fan service – including an alternative ending to the film introduced by the Wachowski brothers themselves (sort of).

Our plan was to do a new *Earthworm Jim* from scratch, re-imagine the character and give it a real fresh new look, similar to how DC reboot *Batman*. So we started on that and then Atari told us they couldn't afford to make the game, and that was a problem because we had already started on the *Earthworm Jim* engine, we actually had developers sitting there laying out *Earthworm Jim* levels trying to get the technology up and running. I was also working on another game at the time, which I had really big hopes for. The game was called *Plague* and it had amazing new hooks never seen before. The problem was that we were really struggling to get budget down to 10-12 million, I really needed about 17-20 million to make it because I wanted it to be epic."

Haemorrhaging money, Atari asked Shiny to create a simple *Matrix*-style fighting game for the PSP. But then disaster struck.

"The money got worse and worse and then Atari announced that they were going to sell off all their development studios," says David. "They gave me a deadline (March 2007) to find a buyer for Shiny or they would close the doors. I resigned and promised my team that I would try to find a buyer for Shiny. I had a bigger idea, I got together with two different groups of investors and we tried to buy the entire Atari Corporation and brand out of Infogrames. We offered them hundreds of millions of dollars but they wouldn't take the meeting. I then found a buyer just for Shiny. Surprisingly, the CFO forcing the sale, who set the March deadline, then resigned from Atari. So the panic to sell Shiny vaporised, now I can't have Shiny and I can't buy Atari, so that's when started consulting for the business. About ten months later, Shiny was bought by Foundation 9, the company I had contacted when I left. So at the end of the day, the staff were safe, that's all that mattered."

David now heads up his own consultancy firm GameConsultants.com, where he lends his business acumen and experience to others. David has also been instrumental in helping people to get a leg up in the industry. His website Game Industry Map provides an online information hub showing the locations and whereabouts of developers on a global map, and his Project Top Secret, in partnership with Acclaim, gave 60,000-plus bedroom programmers and new talent the chance to get involved in the creation of a forthcoming MMO game.

In 2007 Foundation 9 announced it was merging their California-based studios, The Collective and Shiny, and renaming them Double Helix Games. The announcement added flames to an industry rumour that Atari didn't offer up the Shiny name as part of the acquisition package to Foundation 9, and still owned the Shiny name. If true, then with ownership of many of Shiny's past licences still with Interplay, the ashes of this talented studio would be scattered across three different organisations, each part unlikely to ever glisten quite as brightly again.

The Shiny team working on a *Cauldron* reboot? Possibly.

1995 SOME KEY MEMBERS OF THE TEAM DECIDE TO LEAVE THE COMPANY AFTER DAVID MAKES THE PONDEROUS DECISION TO STEP INTO 3D GAME DEVELOPMENT

2002 INTERPLAY APPROACHES DAVID AND OFFERS TO BUY SHINY. DAVID AGREES.

2003 ATARI PURCHASES SHINY FROM INTERPLAY FOR $47 MILLION

2007 SHINY MOVES OFFICES TO NEWPORT BEACH

2007 ATARI BEGINS SELLING OFF ITS DEVELOPMENT STUDIOS AND SELLS SHINY TO FOUNDATION 9

2008 FOUNDATION 9 ANNOUNCES THAT IT IS MERGING SHINY WITH ANOTHER CALIFORNIA-BASED STUDIO THEY RENAME THEM DOUBLE HELIX GAMES

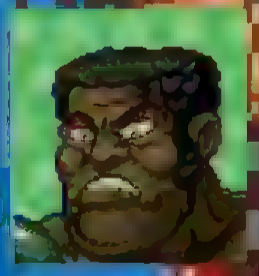
THE CLASSIC GAME

SUPER PUNCH-OUT

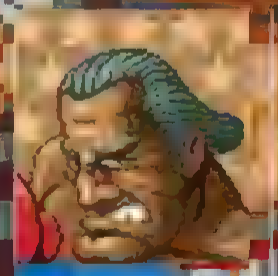
Picking its first fight back in 1984, *Punch-Out!!* was a comical arcade boxing game about a wireframe pugilist with moss hair who had to battle a cast of boxers who resembled the characters of *Popeye*.

Many fans hold up the NES version of the game to be the pinnacle of the series, owing to the game's memorable introduction of the series' iconic hero Little Mac, but it wasn't until the arrival of the Super Nintendo that the game's creator, Genyo Takeda, finally had the tools to bring his inaugural arcade boxing experience into the home with *Super Punch-Out!!*

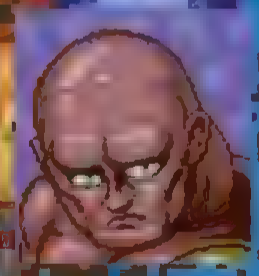
Bald Bull, the first belt holder you face, is one of three boxers carried over from the NES game. With a head shaped like a jelly and a symmetrical eyebrow-moustachio thing going on, Bald is the most faithful in look and move set to his 8-bit counterpart.



Sandman was the final boss in the original arcade game. Here, however, the original Heavyweight Champion of Nintendo Boxing has been relegated to the position of midway boss. It's probably a good thing, too, as he's not as imposing as he once was.

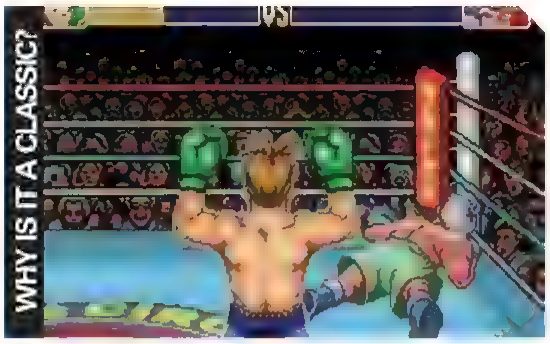


Super Macho Man was the last competitor you fought in the *Super Punch-Out!!* arcade game. This grey-ponytail-wearing, bronze-bodied Californian geriatric fights with gold gloves and matching boots. He's a sycophantic poser, too.



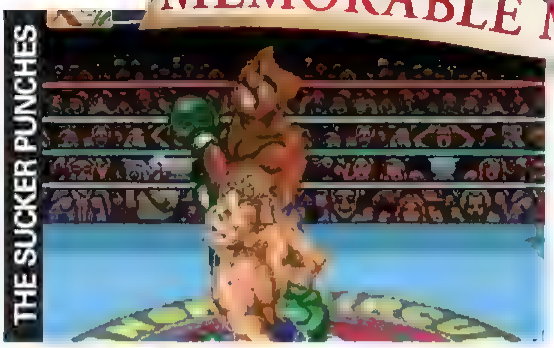
This bald and emotionless looking Ivan Drago-looking robot is the final character in the game. Before you get to face Nick though, you have to fight his brother Rick. Nick and Rick look identical except for the fact that Rick smiles and wears ear jewellery.

MEMORABLE MOMENTS



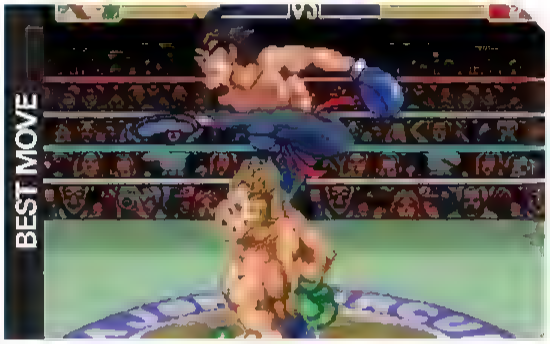
It's got the power!

Split up into three individual circuits and with an impressive roster of 16 fighters for you to challenge, *Super Punch-Out!!* is the biggest game in the *Punch-Out!!* canon. It also boasts some of the slickest two-dimensional graphics ever to be beamed from a Super Nintendo. Consequently, *Super Punch-Out!!* actually feels more like a 16-bit re-imagining of the original coin-op version rather than an out-and-out sequel to the NES game. It also benefits from the power of the SNES to knock out some wonderful-looking cartoon boxers and some pretty flawless animation, too.



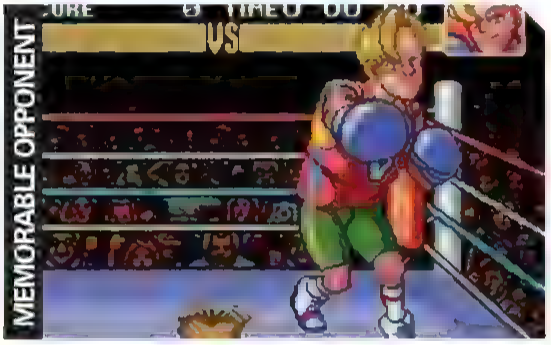
Breaking the rules

As good as the game may be, it isn't without a few niggles. For one, the popular pint-sized underdog Little Mac, from the NES game, was replaced with a sun-bathing, muscle-pumped Adonis who looked like he'd squandered his prize purses to undergo intense surgery to look like his hero Matt Damon. Nintendo also slightly eschewed the rules of boxing in *Super Punch-Out!!*. Here – as in the original arcade game – fighters get a single round to either knock their opponent out cold or win by TKO. And there's no such thing as a referee's decision. This is the speed dating of boxing.



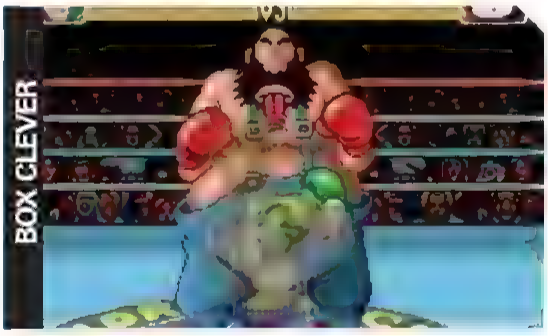
Illegal assaults

Although it's a blatantly illegal move, Dragon Chan's 'leap off the ropes at either end of the ring and kick you square in the face' assault is still a real crowd pleaser. While the speed that Dragon Chan moves at means that you will have little warning that the move is coming, the attack is actually relatively straightforward to avoid. Dragon Chan was actually a carryover from the original *Super Punch-Out!!* – the soft arcade sequel to the original *Punch-Out!!* game. The character's fighting style is quite similar to the NES boxer Don Flamenco, which could be the reason why Chan never found his way on to the NES port.



Narcis Prince

This prissy British boxer makes it in for sheer comedy value. Narcis is a blond narcissistic prince (hence his name) who looks like Leonardo DiCapno in Timmy Mallet's clothes. Don't let his pretty face and curious attire deceive you though, Narcis is a tricky character to fell. The best way is to bop him in his stomach, watch him double over and then punish him with a quick jab to his head. This guy seriously hates taking a blow to the face – smack him in his big, fat, beautiful nose and watch as he does an impression of a melodramatic hypochondriac with a hornet allergy who's just been stung in the eye.



Study your opponents

What really makes the *Punch-Out!!* series stand out from most other fighting games is its incredibly simple and reactive-feeling controls (there are four basic attacks and two special haymaker moves that become available when your stamina bar is full), the acute balance of timing punches and defences, and the notion of reading your opponents as they telegraph their attacks with comical visual cues. You could argue that fights are simply a bunch of elaborate quick-time events, and you might have a point. But we would say that these are the raw workings of boxing re-created brilliantly.

Becoming the best

It takes courage, stamina and skill to become the champion of *Super Punch-Out!!*. Actually, all it takes is a little bit of practice and the capacity to remember things. Anyway, knock the nonchalance out of the current world champion and a sweet victory will be yours to savour. What follows are a series of short press statements from each boxer you've destroyed. Some will opt to take their embarrassing defeats like men, while others, such as Bald Bull and Mr Sandman, will try to goad you back into the ring, and Bear Hugger will reveal to you that it's actually possible to knock him out in just 17 seconds.

What the press said... ages ago

EGM 83%

"The Super NES version is truly a winner. Once you pick up the controller, you won't have any problems at all on the game technique. Fight never-before-seen boxers in past *Punch-Out!!* games. This may not be a realistic boxing game but it has fantastic gameplay."

What we think

We agree completely. *Super Punch-Out!!* has great gameplay and brilliant controls to boot. But don't sit there comparing it to the NES game – it'll eat away at you. Just see it for what it's trying to be – a spruced-up home port of the original arcade game.

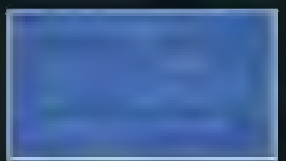
IN THE KNOW

PLATFORM: SNES
DEVELOPER: IN HOUSE
PUBLISHER: NINTENDO
RELEASED: 1995
GENRE: SPORTS
EXPECT TO PAY: £12

The Making Of...

Dandy

It may be obscure but, as Gauntlet's most prominent influence, Dandy is grandfather to dozens of dungeon crawl games. Craig Grannell talks to Dandy creator Jack Palevich about how it began



IN THE KNOW

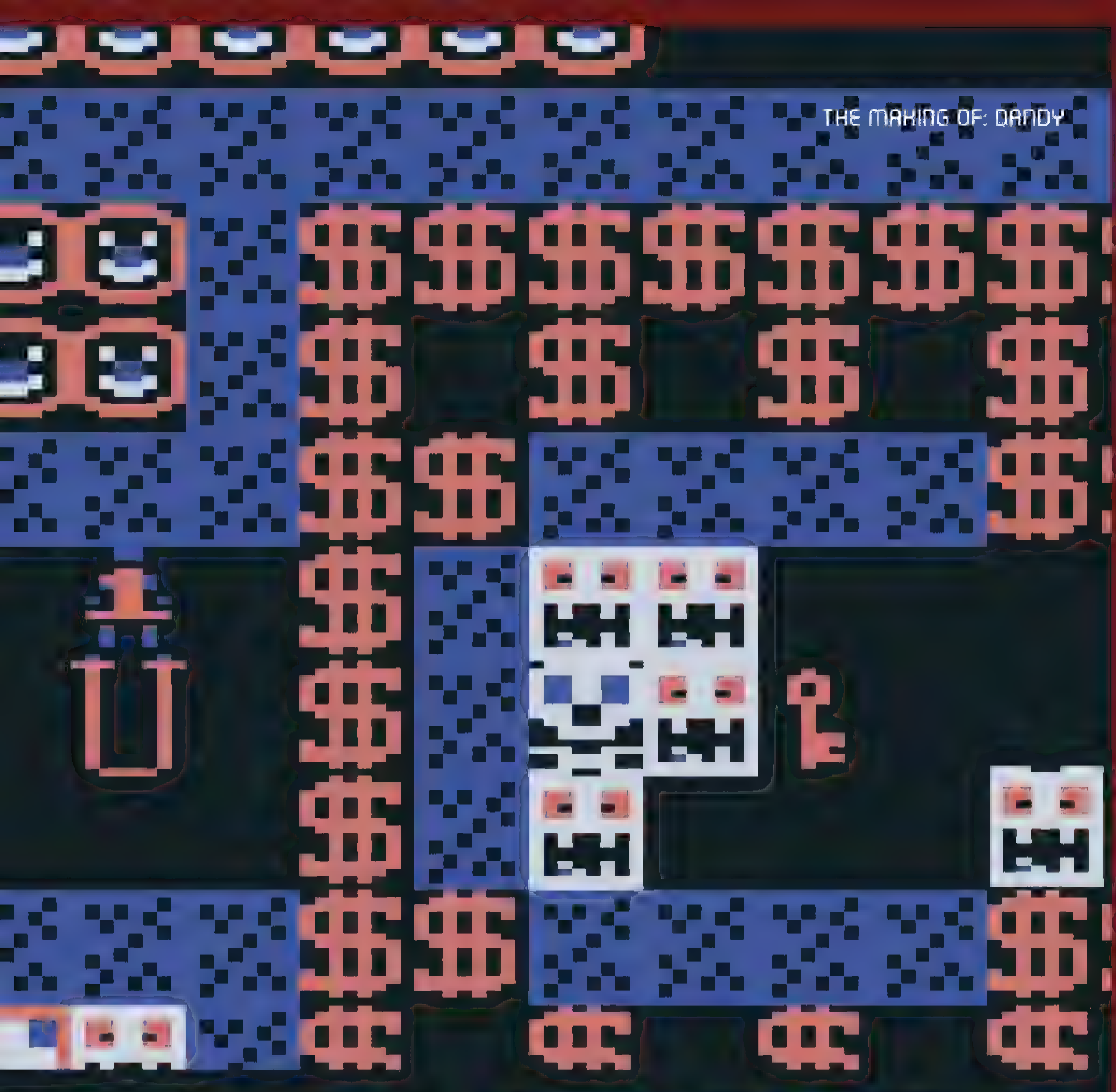
- **PUBLISHER:** ATARI PROGRAM EXCHANGE
- **DEVELOPER:** JACK PALEVICH
- **RELEASED:** 1983
- **PLATFORM:** ATARI 8-BIT
- **GENRE:** ARCADE SHOOTER
- **EXPECT TO PAY:** £10+

A sprawling labyrinthine dungeon crawling with deadly monsters, belched out by generators. Keys that unlock secured areas of the dungeon. Four brave and hardy warriors, intent on reaching the dungeon's lowest levels, using only their wits, paltry weapons and sporadically found food to aid them. This might sound like Atari's hit arcade game *Gauntlet*, but we're talking about *Dandy* (also known as *Dandy Dungeon*), a top-down, RPG-inspired, dungeon-based shooter, released for Atari 8-bit systems. And before anyone gleefully yells "clone!", *Dandy* arrived a full two years before *Gauntlet* – the arcade game is the clone.

Dandy's story begins at the Massachusetts Institute of Technology (MIT). In 1982, Jack Palevich was investigating ideas for his undergraduate thesis. A keen programmer from an early age, Jack initially considered writing an Atari 800 emulator for the MIT CADR Lisp Machine. "It would have been one of the first personal computer emulators," maintains Jack, "but after my thesis advisor stopped laughing at the absurdity of using a $100,000 machine to emulate an $800 machine, he asked me to pick another topic."

Along with an interest in computers, Jack liked co-operative gaming, and set about combining the two. "I never played any RPGs," he admits, adding that he didn't have the time, and had far too much fun programming, "but I'd bought the manual sets and watched other people play. I decided I wanted to recreate dungeon exploration pen-and-paper role-playing games on a computer, including the important team-based element".

Influenced somewhat by the Xerox Alto *Maze War* game – which Jack calls "the very first multiplayer LAN-based FPS"



In addition to various top-down maze-based arcade games, *Dandy* slowly came together. "My initial plan included an active dungeon master, at a second computer, who controlled the dungeon, and sent in waves of attacking monsters," reveals Jack, who also invented various foes to roam the dungeon, hand-to-hand combat involving lightsabers, magical weapons, start and end movies, and an ambitious 3D viewpoint, "but I only had three months to write the game, while also still going to classes."

Dandy was subsequently scaled back to meet the tight deadline. The 3D viewpoint was scrapped in favour of simpler 2D levels, and many other components were simplified or removed. Arguably, though, the biggest change was to *Dandy*'s benefit. "Due to time-pressure, the dungeon-master console devolved into a simple file server, and once it was just a file server, it made sense to use the Atari 800's floppy disk," says Jack. The importance of this change can't be overstated – *Dandy* suddenly shifted from a complex, multi-computer gaming environment (which, admittedly, was ahead of its time, but unlikely to enable *Dandy* to achieve widespread popularity) to a tightly honed single-machine multiplayer videogame, combining RPG elements and arcade action.

"My initial plan included an active dungeon master, at a second computer, who controlled the dungeon"

The Making Of... DANDY

Jack admits that although time pressure often forced his hand, he was by this stage already increasingly thinking about gameplay: "Many of *Dandy*'s changes happened in response to playtesting feedback. For example, I used to save a level's state when you left it, so you could go back, because the original idea was for players to go to the bottom level and then return back up. But nobody ever went up, except by mistake, so I took that feature out."

The inclusive nature of the development also led to another standout feature: a level editor. "That was a happy accident," admits Jack. "The first thing I did with *Dandy* was create a big, empty level with a man running around it. On playing the level, it occurred to me that if I had the man leave a trail of shapes, I could use that as a simple paint program to create a level editor."

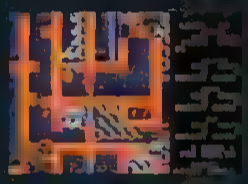
With *Dandy* having a level editor right from the start, Jack was able to get friends to design levels, easing pressure when his own ideas ran dry. "I used a letter to display the level name, and so it seemed reasonable to have 26 levels, but I ran out of ideas long before the end – one level's my signature, 'Hackerjack', and another's a picture of my dog!" Despite the occasional iffy design, Jack considers some of his *Dandy* levels a success: "My favourite is the first level, which was one of the first I designed, as a tutorial on how to play the game. I'm also proud of the final 'Heaven' level, and like the idea of a level full of treasure that endlessly repeats."

Elsewhere, Jack set about fine-tuning the dungeon's contents: a mix of walls, monsters, food and devices to aid players. The monster mechanic in *Dandy* was unique at the time: often appearing from spawners, monsters attack in swarms; monsters also come in three sizes, devolving to the next size down when shot, becoming less deadly. Shoot the smallest monster type and it dies. Much of this design was technically driven, as Jack explains: "Once I decided on allowing a level editor, I wanted to ensure every possible level just worked. I didn't want auxiliary data structures that might limit how many monsters you could use. I wanted to have all the state of the game stored in the 2D array that was used to display the level. So each monster was represented by a single number, which was used directly by the Atari hardware to draw the monster's graphics. When a strong monster took damage, I'd replace it with a weaker monster, and so on until it was destroyed. It was then simple to use three different graphics for the different levels of monster health."

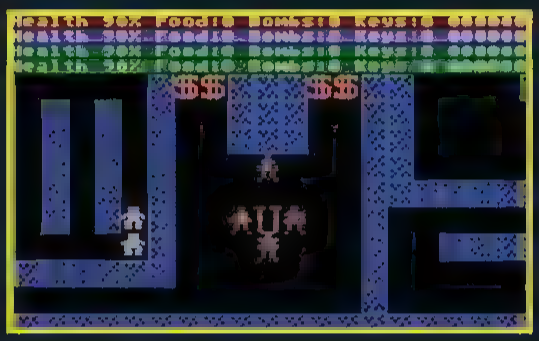
RUN THE GAUNTLET

DANDY AND GAUNTLET are poles apart aesthetically, but on playing both games, it's readily apparent how similar they are. Both offer simultaneous and slightly awkward four-player modes; both enable you to rampage around a scrolling dungeon, killing monsters that spew forth from generators; and both offer a key/locked door model, along with peppering the dungeon with health-boosting food, which has mysteriously managed to stay fresh in putrid conditions.

Most of *Gauntlet*'s changes were designed to suck coins: health levels constantly dropping, immediate food consumption, a lack of player resurrection, and more frenetic gameplay. That said, *Gauntlet* also added important ideas to the mix, including distinct monster types, and melee attacks for hand-to-hand combat. It's likely, though, that *Gauntlet*'s sheer success, rather than amended gameplay mechanics, are what led to it becoming a 'template' for an entire genre, at the expense of the obscure *Dandy*."



» [Atari 8-Bit] Level C introduces the first enemy spawners, resembling skulls, ramping up *Dandy*'s difficulty level significantly.



» [Atari 8-Bit] For Jack, enabling four players in *Dandy* was the heart of the game: "It was all about re-creating the RPG dungeon party experience."

» [Atari 8-Bit] Overt instructions 'hidden' in the maze design of level A, providing a tutorial on *Dandy* components.

The spawners arrived from a need to make levels harder, and were inspired by the cellular automata of Conway's *Game Of Life*; but monster swarms, where the player rapidly finds themselves surrounded, came from nothing much at all. "When I created *Dandy*, I was unaware of the likes of [popular Eighties college game] *Rogue* and didn't have ideas for monster behaviour beyond 'run right towards the player'," laughs Jack. "If I'd known about *Rogue*, maybe *Dandy*'s monsters would have been more interesting!" While never interesting, Jack reveals the monsters sometimes at least became odd during playtesting: "There were bugs where the monsters all ran away from you, or ran at right angles, resulting in orbiting monsters! In retrospect, I should have used these bugs to implement 'scare monster' and 'confuse monster' spells!"

Final pieces of the *Dandy* puzzle centred around ensuring games lasted a decent while. With up to 30 per cent of your heath removed on hitting a monster, food was sprinkled around each level. Unlike the later *Gauntlet*, *Dandy* enables you to store food, saving it for when it's most needed. "Notice that eating food always maximises your health," says Jack. "I wanted the player to decide how much they wanted to gamble on using food – should they wait until their health is low, but then risk dying from a single monster bite?" But even death is not the end in *Dandy*, since shooting resurrection hearts enables players in 'limbo' to return. "The heart was one of the game's last additions. It was added because during playtesting people would start a game over once a party member died. Adding the hearts encouraged the party to keep going, and gave players a nice side-quest."

With his game complete, Jack got an 'A' on his thesis, and *Dandy* was subsequently released through the Atari Program Exchange. But the future for Jack and *Dandy* became turbulent when Atari's arcade division unleashed *Gauntlet*.

Strikingly similar to *Dandy* (see 'Run The Gauntlet'), Atari's arcade game led to Jack taking legal action to ensure he retained the right to further develop his own creation. "Atari really took advantage of me," he says, ruefully. "To be honest, IP laws weren't very clear in those days, and also MIT owned the rights to my thesis work, and wasn't interested in pursuing claims against Atari."

Jack says his biggest regret, aside from possible lost royalties, was not demanding a 'designed by' credit in *Gauntlet* itself: "I asked for it, but Atari cleverly put me off with the excuse that the ROMs had been burned. Unfortunately, I didn't think of requesting a credit in future revisions of the game." We ask whether Jack feels slighted by the incident, and whether he thinks *Dandy* has been wrongly overlooked as father to entire genres, in favour of *Gauntlet* – especially given that many of *Gauntlet*'s gameplay mechanics originated in *Dandy*. "My friends and much of the game design community know about *Dandy*, and so I don't really mind. Also, after *Gauntlet 2*, the *Gauntlet* franchise moved off in its own direction, away from *Dandy*. I don't think current versions of *Gauntlet* have much to do with my design."

Gauntlet also pops up when we ask what Jack would change in *Dandy*, given the chance to go back: "That's a good question. Most of the obvious improvements were done in *Gauntlet* – things like adding character classes, more types of monsters, changing the environment sprite set on different levels, adding in synthetically generated levels, character classes, better animation, more kinds of loot, and so on... But I think if I had to do *Dandy* again with exactly the same time and design budget, I'd put in differently shaped levels, and a few more types of monsters. And it might be worth creating a shop – the money you collect is currently useless!"

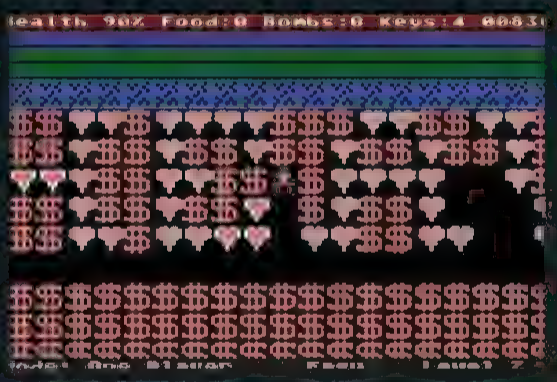
Today, Jack remains immersed in the world of technology, and worked for seven years at Microsoft on graphics libraries and tools for the Xbox and Xbox 360. More recently, he wrote the 'Street View' Google Maps 3D viewer for the Android smartphone. With a family to support, Jack says he has little time for writing games as a hobby, although it's clear *Dandy* never entirely left him. "I like learning new programming languages, and when I learn a new language or library, I often try to implement *Dandy* in it, to get a feel for whether the language is a good fit for videogame programming – I guess most people would use *Tetris* or *Snake* instead!"

We're told the current 'speed record' for implementing *Dandy* from scratch is just 11 hours, using C# and XNA for the Xbox 360. Unfortunately, no version of *Dandy* has yet appeared on a modern console, and Jack's unsure whether that will ever change: "One problem I've run into in developing *Dandy* for modern consoles is that most of the obvious incremental improvements, such as improving the way characters move, or adding more kinds of monsters, actually make *Dandy* more like *Gauntlet* – and that's just not a direction I want to go in. I don't want to just copy that game, and so I feel that I'd have to work for quite a while to move beyond the *Gauntlet* design space and strike out into new territory."

» [Atari 8-Bit] *Dandy* integrates a level editor, enabling you to rapidly fashion your own dungeons.

"If I'd known about Rogue, maybe Dandy's monsters would have been more interesting!"

» [Atari 8-Bit] The final dungeon level is 'heaven': full of cash, but endlessly repeating.

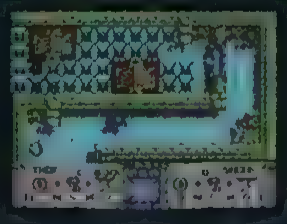


TOGETHER IN ELECTRIC DREAMS

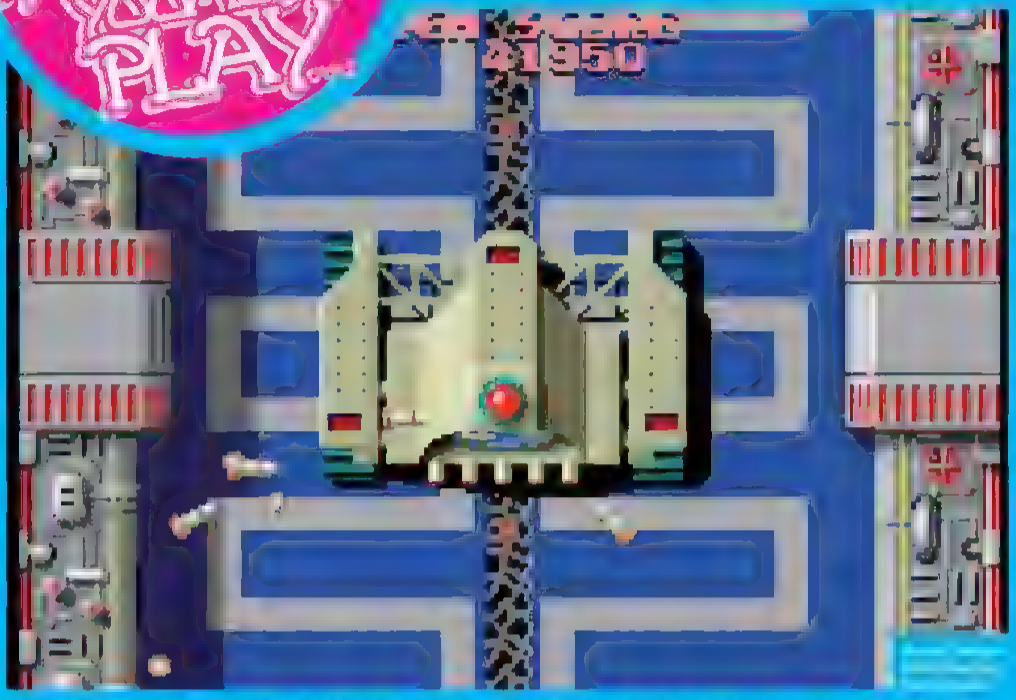
DANDY RESURFACED IN 1986 on major home computer formats. Bearing little direct similarity to Jack's game, the update instead ripped off *Gauntlet*, resulting in a legal spat between publisher Electric Dreams and Atari, causing myriad irony machines to explode.

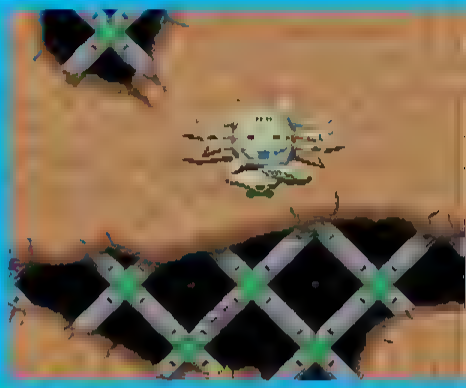
Although the Z80 versions are fine, the C64 port is iffy, and programmer Nick 'Orlando' Pelling reveals why: "*Dandy* was written by a bunch calling themselves 'The Ram Jam Corporation', who promised Electric Dreams a C64 conversion by Christmas. Time passed, nothing turned up, Electric Dreams pulled the plug and asked me to give the C64 version a go."

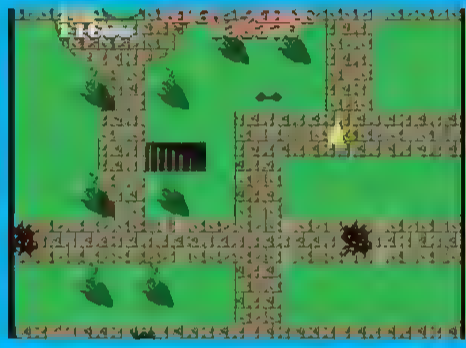
Although he'd never programmed the C64, Nick took on the challenge, considering *Dandy* a simple game: "I knew 6502 assembler inside out, had access to a dev-kit, and worked for six days without sleep, took a day off and worked for another six days to get everything working. Despite the mad effort, Electric Dreams messed up the packaging and were unable to get it out for Christmas anyway..."



WHY YOU MUST PLAY SLAP FIGHT







You'll spot a few helicopters and jets on the ground, but not a single enemy in the air. All comparable Eighties games have flying foes.

So, you think you're clever with your homing missiles? What if Gaudy pops up a few decoy towers to confuse your missiles?

Normally, plants don't respond well to damage, but one *SF* weapon unearths plants. And one of them feeds plants to give you points.

Slap Fight's ground-based enemies go way beyond tanks and gun emplacements, with its famous tube drones and 'lattice bots'

This limited, Japan-only release was made with love

THE CONVERSIONS

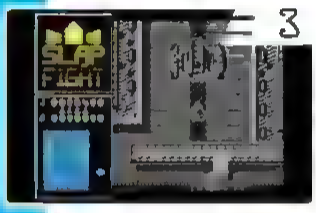
How the various versions compare

1 MEGA DRIVE

Seven years after its arcade release, *Slap Fight* arrived on the Mega Drive. The port is close to arcade perfect. The only problem is default bullets are too strong, so you'll have to increase the difficulty to compensate. The cart also includes *Slap Fight* MD, an unofficial sequel.

2 COMMODORE 64

Sure, C64 was built for shooters, but Johnny Meagan coded this well. Stephen Wahid's graphics were good and Martin Galway did an excellent version of *Slap Fight*'s challenging soundtrack. The levels were faithful to the original, but your homing missiles were a bit slow.



3 ZX SPECTRUM

After the brilliant Mega Drive and Commodore ports, the Spectrum version is disappointing. The lack of in-game music was understandable, but near-invisible bullets are really annoying and the levels are far from accurate. At least it's better than Probe's Amstrad version.

4 AMSTRAD

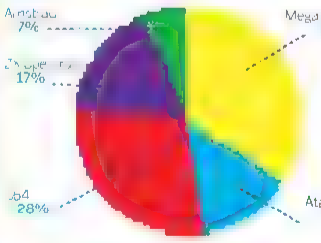
Probe must have been going for some sort of record, as the control panel takes up 44% of the screen. We get the Spectrum's hard-to-see bullets, inaccurate levels, and blocky graphics and the world's smallest bosses. This screenshot is supposed to show the giant three-part tank.

5 ATARI ST

WORST VERSION

The scrolling is far too slow and death sends you a long way back. Levels look fairly accurate, but the enemies appear in the wrong places, shoot too early, and the bullets move too fast. You will die unfairly over and over and over. Forgettable graphics, weak music, no autofire. Evil.

FORUM OPINION



"I have the Mega Drive version and must say that it's awesome. Plus it has music by Yuzo Koshiro" – **GunstarHero**

"The C64 version is a solid conversion that does a good job of capturing the feel of the arcade, though it's not nearly as faithful as the MD conversion" – **Emperor Fossil**

MEG

MANY GAMERS ASSOCIATE THE NAME 'MEGA-CD' WITH 'ABJECT FAILURE', BUT OTHERS BELIEVE THE PLATFORM'S ONLY FAILING WAS TO BRING CD-ROM TECHNOLOGY TO THE PARTY A GENERATION TOO SOON. **DAMIEN MCFERRAN** CELEBRATES A TIME WHEN SEGA WASN'T AFRAID TO TAKE MASSIVE RISKS IN THE HARDWARE ARENA

INSTANT EXPERT

- **Some later Mega** CD games were coded to make use of the additional power of the ill-fated 32X add-on – when fully assembled, this hardware setup was quite a beast and required three different power supplies.
- **The Mega-CD** was also able to play the CD-G+, a format used mainly to display karaoke lyrics on screen – a karaoke add-on was also produced for the system.
- **Digital Picture's** *Sewer Shark* and *Night Trap* were going to be released on the Super Nintendo CD-ROM system – when this was cancelled, a deal was signed to bring them to Mega-CD.
- **All Mega-CD** games carry a region lockout system. This can be circumvented by chipping the machine or purchasing a converter cartridge (such as Datel's CDX) that slots into the Mega Drive's cartridge port.
- **The Ricoh RF5C164** sound chip is one of the machine's greatest assets and grants an additional eight channels of sound, all of which can be used to play samples.
- **Game saves were** recorded to the Mega CD's internal RAM; it was also possible to purchase a RAM cartridge that would offer even more space. Some games – such as *Shining Force* CD – required so much memory to save a game that these carts were almost essential.
- **The Mega Drive** and Mega-CD both feature the same 16-bit Motorola 68000 CPU, but the one present in the Mega-CD has a clock speed almost twice as fast.
- **Notable 'pack-in' games** included *Road Avenger, Sol-Feace, Cobra Command* and *Sega Arcade Classics*, which featured several popular Mega Drive games such as *Golden Axe* and *Revenge Of Shinobi*.
- **Titles such as** *Ernest Evans* and *Sol-Feace* were later released on the Mega Drive, with only the CD audio and cut-scenes missing.
- **Rapper-turned-thespian** Mark Wahlberg can count himself as a Mega-CD star – he appeared in *Marky Mark: Make My Video*, which allowed players to edit three of the Funky Bunch's songs.

They say that pride comes before a fall but as the first broadsides of the 16-bit war were unleashed at the dawn of the Nineties, Sega certainly had plenty to feel proud about. The launch of the Mega Drive (rebranded 'Genesis' in the US) had transformed the company from plucky also-ran to industry leader virtually overnight: the hitherto unchallenged dominance of Nintendo's 8-bit NES was broken and by the time 1992 arrived Sega was able to call 50 per cent of the American home console market its own.

It was during this exciting period in Sega's history that Scot Bayless joined the company. He vividly remembers what it was like to work for Sega at its peak: "It was exhilarating; we were running about 50 per cent on sheer bravado. One of the great things about Sega in those days was the company's willingness to just try stuff. We had a T-shirt made with the slogan 'This may not work, but what the hell' – that was pretty much our attitude." Such joyous ebullience imbued Sega with the confidence to experiment with new technology – and in this case, it was the medium of CD-ROM that intrigued the Japanese firm.

Coming straight from Spectrum Holobyte (where he worked on the epic air combat flight simulator *Falcon 3.0*) Bayless took the position of Technical Director at Sega of America and was ultimately put in charge of overseeing the US debut of Sega's latest piece of hardware – the Mega-CD. It wasn't the first company to embrace the possibilities of the shiny plastic disc – rival NEC had produced its own CD-ROM add-on for the 8-bit PC Engine in 1988 – but with the Sega brand in the ascendancy and the war between the Mega Drive and Nintendo's SNES about to go global, all eyes were on this latest system and the new era of technological brilliance it was about to usher in. "Sega of Japan was already well along the road and the first development kits showed up not long after I did," reveals Bayless. "My first responsibility was to help get the first demos ready for the big announcement event in New York."

The machine had been conceived by Sega's top hardware team in Japan, but so fearful was the company of internal leaks that it had been intentionally slow to provide Sega of America with vital technical information relating to the project. This clandestine attitude meant that Bayless and his team had to work overtime to get things ready for the US launch, which was scheduled for 1992. "At that point there were virtually no software tools – only barely functional dev kits and incomplete documents that were being translated more slowly than they were being revised," he remembers. "There was one stretch where I spent four continuous days in the building – as in didn't actually leave the premises. I lived off vending machines and coffee while I slogged through a bunch of systems code, trying to get the demos to function reliably."

Because the hardware development was being done exclusively by Sega's Japanese team, Bayless decided early on that it was vital that he familiarise himself with the new machine. "One of the first things I did was to go to Tokyo and get up to speed on the hardware," he recalls. With the relevant tools in place, Bayless and his US team were able to start tinkering around with the console, and it didn't take long for potential problems to arise. "The big headline was that there was a second CPU with its own memory – that was the good news," he says. "The bad news was that the data path between

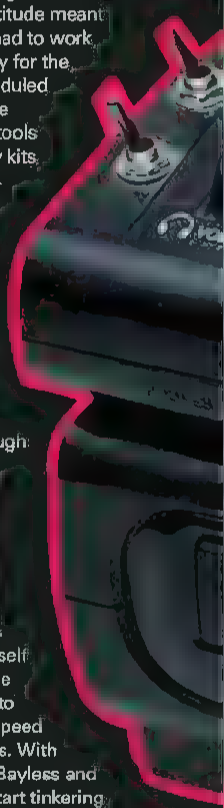
Year released: 1991 (Japan), 1992 (US), 1993 (UK)

Original price: ¥49,800 (Japan), $300 (US), £270 (UK)

Buy it now for: £15+

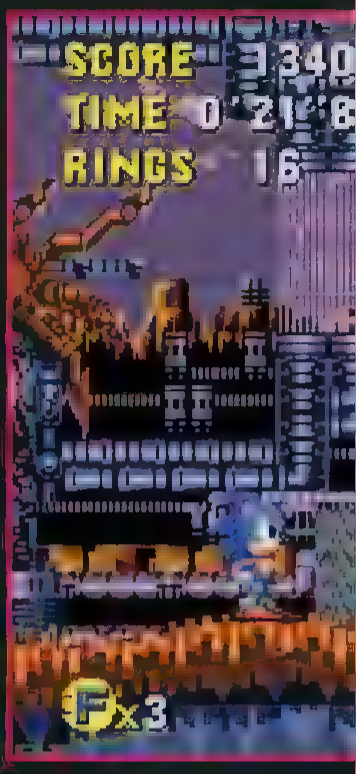
Associated magazines: *Megatech, Mean Machines Sega, Sega Power, Sega Pro, Mega*

Why the Mega-CD was great...
For many gamers it was their first glimpse of the raw potential offered by the CD-ROM format, and while it wasn't the success that Sega might have hoped for, you can't deny that the Mega-CD was privy to some wonderful games. Plus the 'Mark 1' Mega Drive and Mega-CD combi is one of the sexiest hardware setups in the history of consoles – fact.



A-CD

16-BIT
POWER
ON
MEGA DRIVE
SEGA
MEGA-CD
SEGA
READY
disc
ACCESS



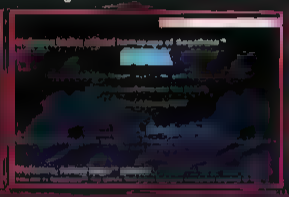
COMMUNITY MEGA-CD SITES TO WATCH

PAL Sega Mega-CD Library
http://www.sega-mega-cd-library.co.uk
If you're thinking of collecting every single PAL Mega-CD release then this site is an essential resource. It contains an exhaustive collection of Mega-CD info, including details about games that never made it and how to emulate the Mega-CD on your PC.

SegaBase
http://www.eidolons-inn.net/tiki-index.php?page=SegaBase
Although it's not specifically aimed at covering the Mega-CD, SegaBase is one of the longest running Sega resources on the net and is home to an excellent piece on the history of the Mega-CD.

Sega-16
http://www.sega-16.com/
Another long-running Sega fan site, Sega-16 is incredibly professional and a joy to navigate. It houses loads of Mega-CD reviews as well as some intriguing features regarding Sega's history. It's all too easy to get hopelessly lost in this excellent site.

Sega Memories
http://sega-memories.blogspot.com/
If your rose-tinted specs have a pronounced 'blue' hue to them then this site will float your boat. Again, it's not expressly aimed at covering the Mega-CD but the sheer volume of Sega nostalgia is guaranteed to strike a cord with fans of the machine.

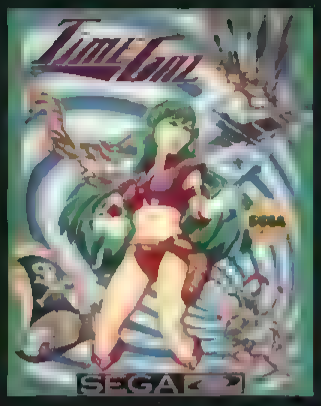


the Mega Drive and the Mega-CD was very limited. What really stood out was the machine's ability to store (for that time) ridiculous amounts of data; the real challenge was figuring out what to do with all that storage. Given the tools of the time, the human cost of building that much content was prohibitive, so people started looking at other possibilities. Probably the most promising element of the hardware was the sound system; it hugely enhanced the sound capabilities of the system of the Mega Drive. But, short of just playing back Red Book audio, nothing really interesting got done with that lovely hardware."

Of course, Bayless couldn't go public with his concerns; Nintendo was gearing up for the launch of the Super Nintendo and as a result Sega was putting a lot of effort into making the Mega-CD a success. However, even when he tried to talk up the power of the console, it didn't always work out as expected. Take the infamous 'Blast Processing' boast, for example. "Sadly I have to take responsibility for that ghastly phrase," admits Bayless with a grimace. "One of our programmers called Marty Franz discovered that you could do this nifty trick by hooking the scan line interrupt and firing off a Direct Memory Access at just the right time. The result was that you could effectively jam data onto the graphics chip while the scan line was being drawn – which meant you could drive the Digital-to-Analogue Converters with 8 bits per pixel. Assuming you could get the timing just right, you could effectively draw 256 colour static images. There were all kinds of subtleties to the timing and the trick didn't work reliably on all iterations of the hardware, but you could do it and it was cool as heck. So during the run-up to the Western launch of Mega-CD the PR guys interviewed me about what made the platform interesting from a technical standpoint and somewhere in there I mentioned the fact that you could just 'blast data into the DACs'. They loved the word 'blast' and the next thing I knew 'Blast Processing' was born."

Tinkering around with new technology was undeniably fun but not having any input into the actual development of the machine was frustrating for Bayless and his team at Sega of America. However, as fate would have it, they were able to pitch in with critical assistance from time to time. "There was one technical issue that we did a pretty good job of coping with before it got onto consumers' radar," remembers Bayless. "The CD drive Sega of Japan chose was, predictably, an inexpensive single speed consumer CD drive. What nobody stopped to think about was how that drive would get used by those early FMV games. I got this frantic call one day from the Quality Assurance guys; they were using retail Mega-CDs – the same ones queuing up to be sold to consumers – for final QA, and they were suddenly experiencing an insane hardware failure rate. Units were burning up in droves; in fact, a few of them had literally caught fire as they died. We were in the big push toward launch and the whole place was in a panic because QA was out of hardware on which to test games. It was like an episode of *House*; the patient was doomed but nobody could figure out why. About all we knew was that the systems started flaming out when the FMV-based titles were being tested by QA. All of those games used some form of multi-stream video technique, which meant they were constantly seeking the read head in the drive. What

» (Mega-CD) *Sonic CD* was easily the Mega-CD's most sucessful platformer. It still sells for over £20.



finally tipped me off was an obscure manufacturer's specification for the CD drive; it was rated for a five per cent duty cycle – which means that they were expecting that no more than five per cent of the time would the drive be seeking from one track to another. It was built for people who wanted to play music CDs and, of course, you rarely seek between tracks more than once every few minutes, so five per cent was way more than they'd ever expected people to need. What nobody anticipated was a multi-stream FMV videogame seeking 75 per cent of the time – or more. We were literally cooking the motors that moved the heads." Bayless had identified the problem in the nick of time and ultimately saved Sega from suffering a potentially catastrophic PR blunder.

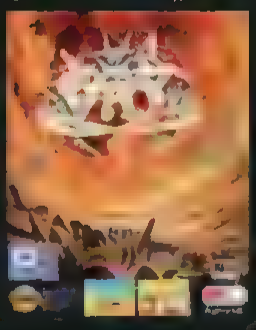
Despite these setbacks, the allure of CD-ROM technology – coupled with Sega's recently elevated status within the videogame industry – meant that hype for the Mega-CD grew exponentially as the launch drew ever closer. As a result, Bayless found himself receiving phone calls from somewhat unexpected quarters. "I remember I was sitting in my office one day tinkering with some low level code when the phone rang," he recalls. "This sexy female voice said, 'Is this Scot Bayless?' I said, 'Yes,' and she replied, 'This is David Bowie's office. Can you please hold?' It turned out it was Bowie's manager, a very cool guy named Bob Goodale. Bowie was completely jazzed about the potential of Mega-CD as a window for music into games." The artist formerly known as The Thin White Duke wasn't the only musician to take interest in the aural capabilities of the Sega's new baby. "I had the bizarre meeting with Michael Jackson around the same time," Bayless remembers. "He'd already signed the *Moonwalker* deal with Sega and they were touring him around the Redwood City studio. I spent about half an hour showing him all kinds of techie stuff we were doing and not once did he ever comment or even make eye contact; he just kind of stood there with about 15 of his minions hovering around him. When we finished there we walked him over to the sound studio, which was just down the hall. Suddenly there was this new person in the room; it was uncanny. Jackson came to life like someone had flipped a switch. It was obvious that the only thing he was excited about was the music."

The Japanese launch of the Mega-CD took place in December 1991. Units flew off the shelves despite the high retail price of ¥49,800, but the relatively small installed base of the Mega Drive in that region meant that sales soon dipped. Sega knew that the US launch was far more important, given the strength of the Genesis. It took place almost a year later (with the machine being re-christened 'Sega-CD') and although the public was ravenous for this new add-on, production issues meant that a paltry 50,000 units were made available to American retailers. Like Japan, the price was bordering on the prohibitive but Sega's lofty standing Stateside helped the company quickly sell through what limited stock it had; by the time 1992 drew to a close, 200,000 units had found their way into US gamers' homes. Likewise, 60,000 of the 70,000 machines made available for the UK release the following spring were snapped up before August. It was a positive start, but it wasn't to last.

> **"A few units had caught fire as they died"**

With the Super NES and Genesis/Mega Drive locked in deadly combat, Sega of America decided to brandish the Mega-CD as a unique weapon in the

» SIMS' *Vay* was picked up for Western release by Working Designs but failed to make the same impact as *Lunar*. It was given a new lease of life on Apple's iPhone.



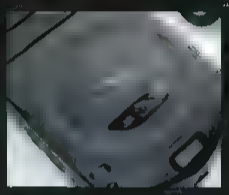
VERSIONS SOME OF THE BEST

Mark II

Introduced in order to bring down costs, the Mk II model is smaller than the original and lacks the motorised CD tray and function lights. It's also a lot less sexy than the previous model, but in its favour it takes up less room and is more reliable.

Wondermega

JVC decided it wanted a bite of the Mega-CD cherry and produced this sleek, all-in-one unit. MIDI and karaoke options were included and the hybrid console was even released Stateside as the X'Eye, although sales were disappointing.



Multi-Mega

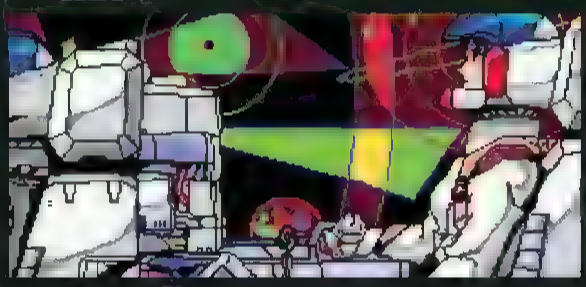
The Multi-Mega was little bigger than a portable CD player (it could even be used as such and was powered by two AA batteries for audio playback) but the price was bordering on the insane – UK gamers were expected to shell out £500 for it.

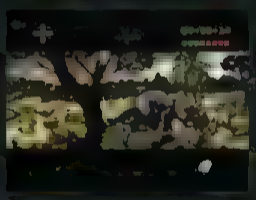
Aiwa CSD-GM1

Perhaps the rarest of all the Mega-CD systems, this Mega Drive/Mega-CD combo looks very much like a traditional boom box. It was produced in limited numbers and only saw distribution in Asia, and as a result it is almost impossible to track down these days.

» Sega focused on promoting the machine's unique FMV-based games, but people soon realised that this gaming revolution was a false dawn of epic proportions.

» Renamed the CDX in the US, the Multi-Mega fused the Mega Drive and Mega-CD into one package – but at £500 in the UK, the pricing was way off.





» (Mega-CD) *Jurassic Park CD* was a huge undertaking for Sega's newly-founded multimedia studio, but with Scot Bayless's guidance, it ended up being pretty decent.

fight against rival Nintendo. A dedicated multimedia studio was established within the company's Californian headquarters at great expense in order to produce top-quality content with which to fill the Mega-CD's shiny discs. "It was a pretty cool place and Sega was willing to invest a lot of money in making it a showpiece," explains Bayless. "The art team was buying SGI Indigo work stations for about $50K per seat, including a copy of SoftImage, and the sound studio was a showcase of sparkly new technology. It was impressive."

> "Could Guitar Hero have gone on Mega-CD? Hell yes" SCOT BAYLESS

The first project assigned to this new studio couldn't have been any more high profile; Sega had secured the *Jurassic Park* licence and was keen to produce a game that demonstrated the Hollywood aspirations of the Mega-CD technology. "The *Jurassic Park* project was a huge priority for Sega, mainly because the association with Steven Spielberg was seen as so important to the PR campaign," recalls Bayless. "Every resource you can imagine was made available. Kathy Kennedy, producer on the film and one of Steven's longest standing collaborators, went way out of her way to help Sega. She opened doors to everything from Phil Tippet's early stop-motion dinosaur studies to concept art from Stan Winston's team to the CG models used for the film. I remember one day this package arrived from Amblin with a cassette tape inside; the only thing on the tape was take after take of Wayne Knight gurgling out his death rattles from the scene with the Dilophosaurs – they really did give us everything." Despite this intense focus, the project endured a torrid development period. "Fast forward about six months and I get this phone call at about 2am from our studio head in Tokyo, who was meeting with the Sega of Japan execs," explains Bayless. "He said, 'I just showed Hayao Nakayama [Sega's CEO at the time] a build of *Jurassic Park*. As of right now, you're in charge of the project. Do whatever you have to do to get it back on the rails.' So I rolled up my sleeves, fired some people and eventually shipped a pretty decent game."

As *Jurassic Park* proves, the advent of CD-ROM technology brought with it amazing potential, but there were less welcome side-effects, too. "*Jurassic Park* represented the transition from the small budgets and tiny teams of the old days to something much more expensive and demanding of real production discipline," says Bayless. "When you're building a game that has to fit into a few megabytes of ROM, it's not inconceivable that you can keep the whole project in your head. But when you're making something that requires a dozen CG animators, casting calls,

location shoots, ADR and Foley sessions, you can't afford to do anything without a plan. I remember that before I took over the *Jurassic Park* project, a team went romping off to Hawaii where they hired a steadicam and spent a week running around in the jungle taking hours of video of palm trees whizzing by. If you look at the finished game, maybe a total of two minutes of that footage survived the project. The rest was worthless, but it cost maybe $20K to get it."

Cash continued to be poured into Mega-CD development and for a time hardware sales were encouraging, but by this point Nintendo had stepped up its game and the SNES was rapidly asserting itself in the West. The once insatiable public interest in Sega's CD-based machine began to wane and the previously 'innovative' tech began to appear stale. This process was aided by the fact that one of the console's key selling points – FMV-based gaming – was something of a non-starter. "Sega got way too focused on FMV," admits Bayless. "There was all this talk going around about games converging with movies and Mega-CD being the gateway to that convergence. Suddenly game guys were thinking of themselves as movie makers. But if you really looked at how that translated into an entertainment experience it didn't take a rocket scientist to realise that the things Mega-CD could do well really had very little to do with movies." As the Nineties progressed, rival CD-ROM-based consoles emerged; while they could hardly be classed as tremendous successes themselves, the arrival of the CD-i and 3DO essentially made the Mega-CD technically obsolete. The failure of the machine was followed by the abortive 32X project ("I was present at the inception of 32X and it was literally designed on a cocktail napkin," reveals Bayless with a laugh) and Sega's previously soaring reputation was left in tatters. To say that Sega's slide began with the release of the Mega-CD is probably doing the machine an injustice, but the high-profile collapse of the format certainly didn't help the company's public image.

It's all too easy to be overly negative when looking back on the Mega-CD, but it's often forgotten that the platform boasted some truly brilliant games. Sega's conversion of Capcom's *Final Fight* was a definite highlight, offering all three characters and a two-player mode (both famously absent from the SNES port), and Working Designs localised Japanese RPGs such as *Lunar: The Silver Star*, *Lunar: Eternal Blue* and *Vay*, making themselves heroes with English-speaking Sega fans in the process. But what does Bayless consider to be the best titles for the system? "For polished gameplay, *Sonic CD*, hands down. For the best soundtrack, *Ecco CD*. For the best use of the platform, I'd have to go with Kojima's *Snatcher*."

LIFE'S A BEACH

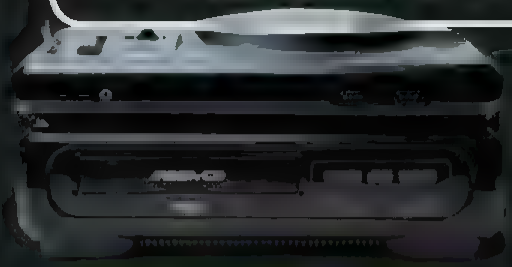
Bayless may have been instrumental 'behind the scenes' at Sega of America but thanks to a famous American magazine advert, he also became the visible 'face' of the Mega-CD to many gamers. He was featured on a double-page spread where he extolled the virtues of Sega's latest system, and the promotion was printed in leading US magazines such as *GamePro* and *EGM*. "That shot was taken on Stinson Beach just north of San Francisco," recalls Bayless when questioned about his brush with superstardom. "The agency had hired some very high profile photographer to do the shoot and his vision was to put that wall of TVs in front of the setting sun with me in the foreground. So there we were, on the beach with him on a ladder and the two of us surrounded by a herd of people and gear. The agency guys are there sitting in director's chairs like directors on a movie set. They're moving stuff around, restacking the TVs, testing low angles, testing high angles. They're facing the sun. They're facing away from the sun. They're sending people into the city to buy me clothes because the photographer wants to try out new outfits – I changed about six times during the course of the afternoon with people holding up blankets while I stripped. At the end, the only thing I was wearing that was actually mine was my shoes. Meanwhile, there are all these people walking by on the beach asking if I'm someone famous and, of course, while all this is going on the sun is going down. Finally, they start shooting at like 7pm, but by then the sun was gone. So when it's all done you have a shot they could have done on a sound stage with a couple of buckets full of sand. But hey, for about seven hours I got to be a movie star!"

Plenty of theories have emerged as to why the Mega-CD failed to make a significant impact on the world of videogames; it's been argued that the price was too high, the inability to function without a Mega Drive limited its sales potential and the technology involved simply wasn't powerful enough to convince people to upgrade. Bayless has his own verdict. "What turned out to be problematic was the content," he explains. "Personally I don't think the platform ever really demonstrated successfully what the value proposition was. A few years later Sony very successfully positioned the PS2 as a competitively priced DVD player that also happened to offer a great gaming experience. The Mega-CD might have been able to play a similar gambit but that was never part of the plan. However, there was a deeper issue; it was fundamentally a solution in search of a problem. I remember sitting in lengthy head-scratching sessions – not just at Sega of America but at Sega of Japan as well – where we were saying to each other, 'Great, so now we have a storage system that's 100 times bigger than before. So what?' Worse still, access to all that data was 100 times *slower*. It was a fundamental paradigm shift with almost no thought given to consequences. I honestly don't think anyone at Sega asked the most important question: 'Why?' There's a rule I developed during my time as an engineer in the military aviation business: never fall in love with your tech. I think that's where Mega-CD went off the rails. The whole company fell in love with the idea without ever really asking how it would affect the games you made."

When asked what could have been done to improve the Mega-CD's chances, Bayless recounts an interesting anecdote that is made all the more ironic given the game industry's current preoccupation with music games. "Record producer Todd Rundgren showed up at the studio one day, pitching something that was like the pre-biotic version of *Guitar Hero*," recalls Bayless. "He wasn't all the way there but he was poking in the right direction. Sadly we were all too caught up in our own skewed vision to really understand him or what could have been done with his embryonic ideas. Could *Guitar Hero* have been done on Mega-CD? Hell yes. Would that have transformed the business and saved Mega-CD? Who knows, but I bet it would have made a splash."

» [Mega-CD] *Night Trap* went on to become something of a 'video nasty' and sparked an age rating classification scandal upon its release in the US and Europe.

MEGA-CD



PERFECT TEN GAMES

It's easy to laugh at Sega's Mega-CD, but to do so would be rather foolish. Despite it's poor sales and the numerous problems Sega faced, plenty of great games were available for the system. The following examples are the very best representing a wide range of different genres. Enjoy.

01

SONIC CD

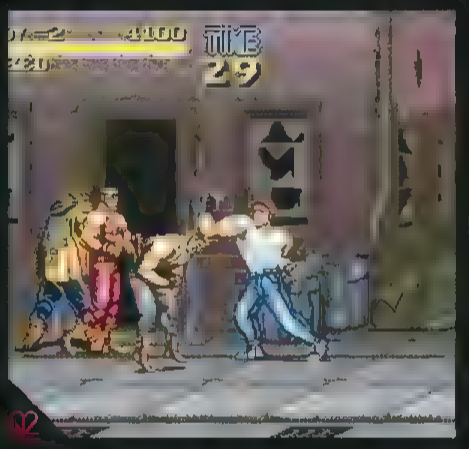
- RELEASED: 1991
- PUBLISHER: SEGA
- CREATED BY: IN-HOUSE
- BY THE SAME DEVELOPER: SONIC THE HEDGEHOG 2

01 **Every console needs** a killer app to justify its existence, and *Sonic CD* is as close as you're going to get on the Mega-CD. Regularly cited as one of the best games in the series, this ambitious title made good use of the CD format's storage potential by including gigantic levels, Mode 7 bonus stages and a spectacular soundtrack. The game was made even deeper by the fact it was possible to time-travel forwards and backwards on each level, essentially making the stages three times as big. Interestingly, the US version features a different soundtrack to the Japanese and European variants – although both selections of songs are equally fantastic.

FINAL FIGHT CD

- RELEASED: 1993
- PUBLISHER: SEGA
- CREATED BY: SEGA/CAPCOM
- BY THE SAME DEVELOPER: SPIDER-MAN VS. THE KINGPIN

02 **When *Final Fight*** (unquestionably the quintessential arcade hit of the late Eighties) was ported to Nintendo's Super Famicom in 1990, you could practically hear the cries of despair emanating from Sega fans the world over. For a time it seemed as if this Capcom classic would remain exclusive to Nintendo, but thankfully Sega was granted permission to reprogram the game when the Mega-CD came along – it produced what is arguably the best home console conversion (aside from recent emulated ports). *Final Fight CD* is packed with all three characters and all the levels. Needless to say, the previously smug SNES owners were left feeling a little put out.


02

SHINING FORCE CD

- RELEASED: 1994
- PUBLISHER: SEGA
- CREATED BY: SONIC SOFTWARE PLANNING
- BY THE SAME DEVELOPER: SHINING FORCE GAIDEN (GAME GEAR)

03 **The only *Shining Force*** game to make its way onto the Mega-CD is a combined remake of the Game Gear releases *Shining Force Gaiden* and *Shining Force Gaiden 2: Sword Of Hajya*. Visually it's not what you could call a massive improvement when compared to the Mega Drive instalments, but the sheer scope of the challenge is almost overwhelming. So epic was the quest that the Mega-CD internal save game RAM wasn't enough to contain all the data; the purchase of a separate RAM cart was essential if you wanted to see everything the game had to offer.

LUNAR: THE SILVER STAR

- RELEASED: 1992
- PUBLISHER: WORKING DESIGNS (US)
- CREATED BY: GAME ARTS/STUDIO ALEX
- BY THE SAME DEVELOPER: SILPHEED

04 **Game Art's epic** RPG was the closest the Mega-CD ever got to having its own *Final Fantasy*, and following its Japanese release, the console's sales in that region were given a boost. Although the in-game graphics were hardly ground-breaking, they were accompanied by some lush anime sequences and an astounding soundtrack by Noriyuki Iwadare. US firm Working Designs picked *Lunar* up for Western localisation and did a fantastic job – the company later returned to the game when it was remade for the PSone in 1996.

THUNDERHAWK

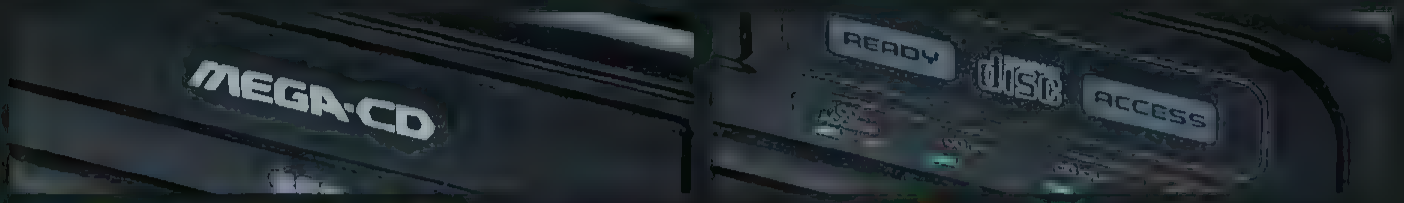
- RELEASED: 1993
- PUBLISHER: CORE DESIGN
- CREATED BY: IN-HOUSE
- BY THE SAME DEVELOPER: CHUCK ROCK

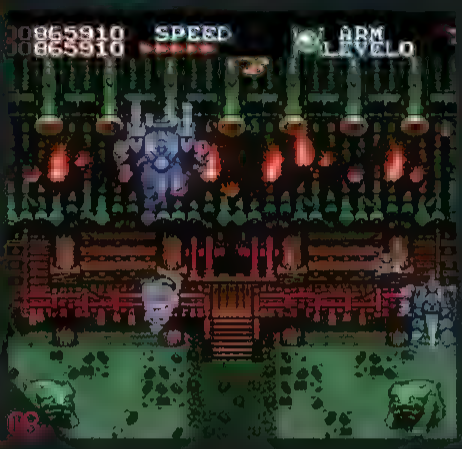
05 **UK-based Core** Design was a staunch Sega supporter and produced some of the Mega-CD's finest moments. While games such as *Battlecorps* and *BC Racers* pushed the hardware but fell a little short on enjoyment, *Thunderhawk* was a complete success in both regards. Smooth Mode 7 rotation and scaling was coupled effectively with some of the most frantic action ever witnessed on the format, and the game was rightly praised by the press upon release. A 32-bit sequel followed that added full 3D visuals, but the original remains the one we're most fond of.

03

04

05





LUNAR: ETERNAL BLUE

- RELEASED: 1994 (JAPAN)
- PUBLISHER: WORKING DESIGNS (US)
- CREATED BY: GAME ARTS/STUDIO ALEX
- BY THE SAME DEVELOPER: TENKA FUBU

06 **Although it doesn't** attract as much praise as its predecessor, *Lunar: Eternal Blue* is just as enjoyable an RPG experience as *The Silver Star*. Also, despite featuring a new cast of protagonists, the gameplay remains largely unchanged. Again, Working Designs took the plunge and brought this Stateside with a great translation. In both Japan and the US, this was one of the final high-profile pieces of software for the ailing platform; by the time of the American launch the system was all but dead.

POPFUL MAIL

- RELEASED: 1994
- PUBLISHER: WORKING DESIGNS (US)
- CREATED BY: FALCOM
- BY THE SAME DEVELOPER: YS

07 **Originally produced for** the NEC PC-8801 in 1991, this 2D action RPG title shares many similarities with the *Wonderboy: Monster World* series. The player takes on the role of a bounty hunter named Mail, but it's possible to switch to other characters. With the excellent English translation and voice work, the Western version of *Popful Mail* is arguably the best of all the conversions and carries a justifiably inflated price tag when it appears on auction sites today. While we're not fans of unscrupulous game resellers, *Popful Mail* is unquestionably worth paying through the nose for.

ROBO ALESTE

- RELEASED: 1992
- PUBLISHER: TENGEN
- CREATED BY: COMPILE
- BY THE SAME DEVELOPER: SHADOWRUN

08 **A spiritual sequel** to the shockingly brilliant Mega Drive shooter *MUSHA Aleste*, *Robo Aleste* featured the same fixation with large mecha as its predecessor, but was unique because it placed these mechanical killing machines in feudal Japan. Although the gameplay doesn't really present any ideas that couldn't have been achieved on the good old Mega Drive, the music and cut-scenes genuinely elevate the game to a new level of greatness. The game saw release in all three key territories and is in high demand thanks to its overall quality.

SNATCHER

- RELEASED: 1994
- PUBLISHER: KONAMI
- CREATED BY: IN-HOUSE
- BY THE SAME DEVELOPER: LETHAL ENFORCERS

09 **It's ironic that** while many developers wrestled in vain with grainy, low quality FMV to create the ultimate interactive movie, *Metal Gear* creator Hideo Kojima succeeded where others had failed – by using traditional hand-drawn 2D visuals. Showcasing a plot that owes more than little debt to the likes of Hollywood movies such as *Blade Runner* and *The Terminator*, *Snatcher* remains one of Kojima's most beloved works. It was also released on the PC Engine CD-ROM, PlayStation and Saturn, but the Mega-CD outing remains the only version to be officially translated into English. This makes it a highly sought-after title. You need this game, but your bank balance won't thank you.

KEIO FLYING SQUADRON

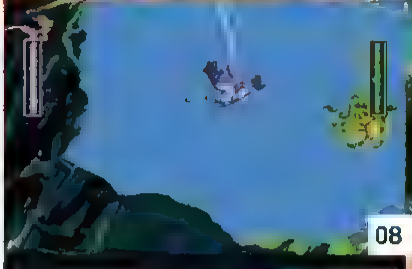
- RELEASED: 1994
- PUBLISHER: JVC/VICTOR
- CREATED BY: IN-HOUSE
- BY THE SAME DEVELOPER: FUNKY HORROR BAND

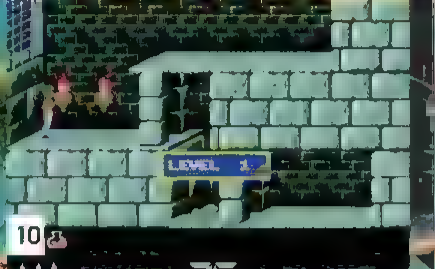
10 **The Mega Drive** and Mega-CD were never gifted with a conversion of Konami's deliriously playable *Parodius*, but JVC's *Keio Flying Squadron* is a perfectly acceptable substitute. Putting the player in the high-heeled shoes of a girl dressed in what looks like a Playboy bunny outfit, *Keio* boasts a similar style of horizontally scrolling wackiness and puts the Mega-CD hardware to good use to produce some excellent cut-scenes and a brilliant CD-quality soundtrack. A Saturn sequel followed in 1996 that added 2D platforming sections, but for pure shooting brilliance the Mega-CD original is where it's at. A relatively late release, the PAL version of *Keio* is common and reasonably priced.

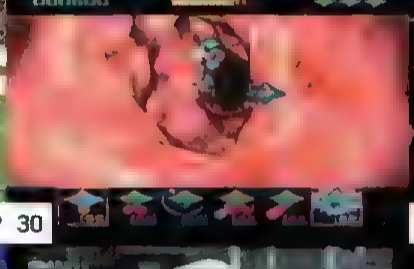
MEGA-CD and the rest...

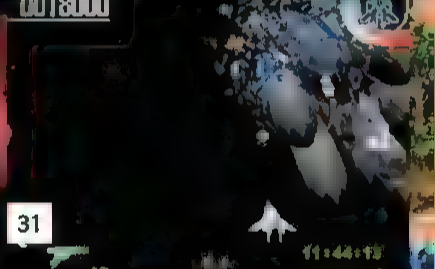
FMV flop or 16-bit wonder? Regardless of your viewpoint Sega's Mega-CD still has plenty of games that are worth seeking out. Here are some of the best and worst

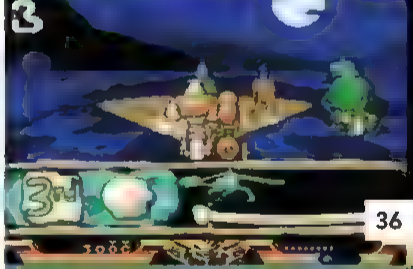
01 SAMURAI SHODOWN
02 ECCO THE DOLPHIN: THE TIDES OF TIME
03 BRUTAL: PAWS OF FURY
04 HEART OF THE ALIEN
05 MORTAL KOMBAT
06 SPACE ACE
07 AFTER BURNER III
08 EARTHWORM JIM SPECIAL EDITION
09 FLASHBACK: THE QUEST FOR IDENTITY
10 PRINCE OF PERSIA
11 SEWER SHARK
12 EYE OF THE BEHOLDER
13 THE ADVENTURES OF WILLY BEAMISH
14 LETHAL ENFORCERS
15 ROAD AVENGER
16 JAGUAR XJ220
17 BATMAN RETURNS
18 COBRA COMMAND
19 HEIMDALL
20 PITFALL: THE MAYAN ADVENTURE
21 SHADOW OF THE BEAST
22 IRON HELIX
23 CHUCK ROCK
24 THE NINJA WARRIORS
25 WILD WOODY
26 BLACK HOLE ASSAULT
27 DOUBLE SWITCH
28 FATAL FURY SPECIAL
29 FIFA INTERNATIONAL SOCCER
30 MICROCOSM
31 SILPHEED
32 HOOK
33 GROUND ZERO TEXAS
34 TOMCAT ALLEY
35 NIGHT TRAP
36 BC RACERS
37 CRIME PATROL
38 JURASSIC PARK
39 NBA JAM
40 BATTLECORPS
41 RACING ACES
42 SENSIBLE SOCCER
43 WINDS OF THUNDER
44 ETERNAL CHAMPIONS
45 CITIZEN X
46 WHO SHOT JOHNNY ROCK?
47 STAR WARS: REBEL ASSAULT
48 DUNGEON MASTER II: SKULLKEEP
49 MAD DOG MCCREE
50 THE SECRET OF MONKEY ISLAND
51 DARK WIZARD
52 SOL-FEACE
53 THE LAWNMOWER MAN
54 WOLFCHILD
55 BRAM STOKER'S DRACULA
56 SOULSTAR

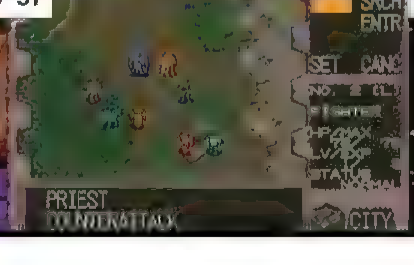


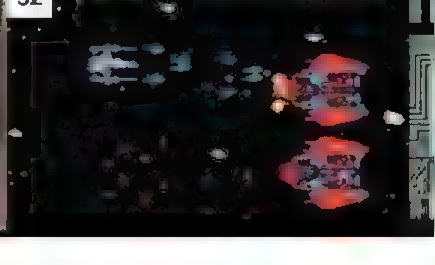












04 05
06
07
11 12
13
14
18 19
20
21
25 26
27
28
32 33
34
35
39 40
41
42
46 47
48
49
53 54
55
56

In the chair with...

HIDEO KOJIMA

FROM SNATCHER TO METAL GEAR SOLID, KOJIMA'S FERTILE IMAGINATION IS THE INSPIRATION BEHIND SOME OF THE MOST LAYERED AND FLESHED-OUT VIDEOGAME UNIVERSES EVER SEEN. HAVING FINISHED TYING UP THE LOOSE ENDS OF HIS MAGNUM OPUS THAT WAS METAL GEAR SOLID 4, RETRO GAMER TOOK TIME TO SPEAK WITH VISIONARY GAME DIRECTOR HIDEO KOJIMA ABOUT HIS LIFE IN THE VIDEOGAME INDUSTRY

It's obvious to anyone that Taito clearly had the literary works of HG Wells in mind when it set about creating *Space Invaders*, and it's equally clear that a few studio heads at Universal Studios smelt an odious whiff of stop-motion in *Donkey Kong*. Heck, two issues back Yu Suzuki admitted to us that *OutRun* was based loosely on the *Cannonball Run* film.

The point that we're trying to make is that cinema has always played a major part in the directions and themes that videogames choose to base their gameplay around. And Hideo Kojima's *Metal Gear* franchise clarifies brilliantly the evolution that this relationship has taken in the last 20 years. *Metal Gear* was created with restrictions in mind. Shirking combat for covertness, it relied heavily on story, characters and cinematic influences to drive its action and drama, and it did so with fantastic results. With those technical 'restrictions' losing their potency to time and new technology, videogames have found themselves in a position where they can finally match their filmic peers both visually and sonically – a notion that has culminated brilliantly in the apparent final episode of Kojima's popular *Metal Gear* franchise.

In this issue's In The Chair With..., **Retro Gamer** speaks to the legendary game director Hideo Kojima about his prolific career in the videogame industry, and tries to eke out some classified intel about what's next for the revered game director and the forthcoming *Metal Gear* movie.

When did you first show interest an in videogames?

Well, I first had an interest in filming... but couldn't be involved. I was facing frustrations at that time. But then came the Famicom (NES), and I fell in love with *Super Mario Bros.* Also, *Portopia Murder Case* was one of my favourite games, too. I really respected these creators, and enjoyed playing these games. But at the same time, I felt that 'videogames' were a new media, a media with potential. I thought that 'this industry was it' and decided to join the company I am in today.

It's said that you joined Konami with the intention of working in their arcade division. How did you feel when this didn't happen?

Yes. At that time, the leading platform in videogames was coin-ops. You could use so many more colours and the most sophisticated graphics at that time. They were followed by the Famicom and then the MSX, in order of technology. To my disappointment I was stationed in the MSX team. I wanted to create things from scratch from the PCBs and had a dream that I could design the control system and the body of the machine. With the MSX, none of this was possible.

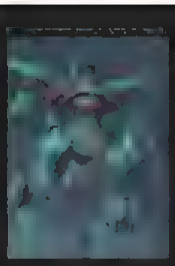
You studied economics in college and originally had ambitions to be a film director. Why did you make the leap to videogames and how did your parents feel about this huge career change?

As I said, I felt that games were a new media, and saw potential in that area. If my father was alive back then, I'm sure he would have been concerned about my intention to join a games company. All of my friends and teachers said that I was crazy for not going to work for a bank or some other 'proper' industry job at that time. My mother was the only person that understood and supported my decision to go into the games industry.

Tell us about your early days at Konami, is it true that you once felt like leaving because many of your ideas were ignored or overlooked? What gave you the resolve to carry on?

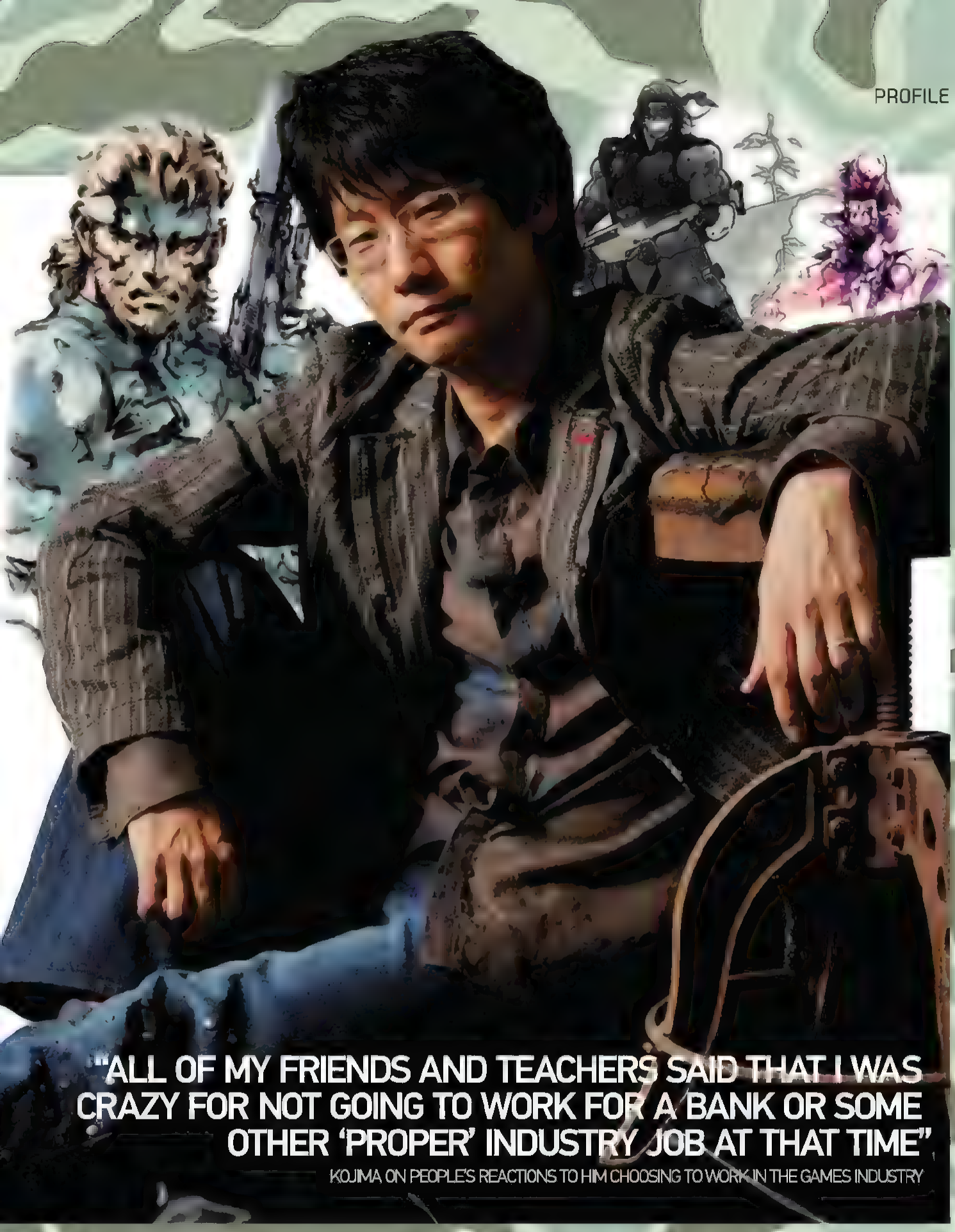
I was helping out on the basic plot ideas when I first joined the company. I was like a trainee back then. It was fun, but really tough. No one taught me what to do and I had no experience, and no one to ask either. So I was struggling every day, and ended up tweaking a bit of an idea – and that project was *Lost World*. After six months, since our project seemed that it was going nowhere, the company decided to drop it. So yes, did feel like leaving when the whole project got canned. But at the same time, I felt embarrassed to leave after all my friends advised me not to get into the games industry. I also felt that before leaving, I needed to finish at least one project.

After the disappointment of *Lost World* it must have felt very gratifying when the



IN BRIEF

Hideo Kojima was born in Tokyo in 1963. At the age of three, he moved to Kobe with his parents. Kojima was an only child and his parents both worked, so often he would return home from school to an empty house. This solitude at a young age would spark Kojima's fascination with TV and film, and an initial interest in pursuing a career in the movie industry. However, it was his love for games that spurred Kojima to take a job working for Konami's MSX division. It was here he began brainstorming ideas for his first game, *Lost World*, but after six months Konami dropped the project, leaving a disheartened Kojima to re-evaluate his future in the industry. Kojima stayed at Konami, and began working on *Metal Gear*, a stealth-action game for the MSX based loosely on the infiltration themes seen in classic war films. *Metal Gear* proved to be a huge success for Konami, particularly in the US when it was ported across to the NES. Since then Kojima has gone on to work and lead numerous R&D departments inside Konami, and has been responsible for writing some of the world's most filmic and detailed game narratives. His most successful creation to date has been the *Metal Gear* franchise. His 1998 PSone game, *Metal Gear Solid*, became the most successful game ever released for the machine, and its follow-up, *Sons Of Liberty* on the PS2, would become one of the most highly anticipated releases in videogame history. Kojima is now the head of his own development team Kojima Productions, which was set up in 2005 to relieve Kojima of management duties and to allow the director to focus his talents more on the creative process of making games.



"ALL OF MY FRIENDS AND TEACHERS SAID THAT I WAS CRAZY FOR NOT GOING TO WORK FOR A BANK OR SOME OTHER 'PROPER' INDUSTRY JOB AT THAT TIME"

KOJIMA ON PEOPLE'S REACTIONS TO HIM CHOOSING TO WORK IN THE GAMES INDUSTRY

HIDEO KOJIMA

[Saturn] *Policenauts* featured dazzling, and rather raunchy, anime cut-scenes.

MSX version of *Metal Gear* then became a huge success for you.

Actually, I had a really great mentor in the company back then. He found out that I failed in my first project, so he invited me out for dinner one night to cheer me up. He was a great guy. In fact, he was one of the people that helped convince the company to do *Metal Gear*

What was it like trying to cram so many different ideas into such limited technology? Were there any tricks you employed in order to get the most out of the MSX2?

In my division there was also the coin-op and Famicom teams working on those platforms. Being in the lowest technology team – the MSX team – meant I always had to compete in order to get noticed. Imagine that you are making two different kinds of movies in one division. One is making a Hollywood blockbuster movie with all the 5.1 sound and all, and the other team is creating a silent B&W picture. I was on this B&W movie team. I was always thinking about ideas that wouldn't rely on technology, but ideas that would compete with the Famicom and the coin-op teams. A perfect example is Big Core in *Gradius*. In the Famicom version, you can display the boss across the screen. But in the MSX version we had to make it much smaller. The VRAM object technology idea was born like this, too. You know, moving the background to give the impression the ship was flying in space. The 'idea thinking' habit I think I owe to the division I was in. Also, working in this division forced me to understand everything – sound, programming, compression – because when you have an idea, you have to pinpoint how this can be managed and give ideas on the technology aspect, too.

[GBA] The *Boktai* series, which Kojima produced, is certainly worth seeking out if you're a Kojima fan.

[Mega-CD] Super violent, super gory, *Snatcher*'s snaking narrative would strike a chord with many sci-fi fans

In what ways has the videogame industry changed since you first started? Do you still have to deal with the same sort of problems you were tackling in the late-Eighties and early-Nineties?
Basically, I don't think the videogame industry has changed all that much. . especially in Japan. Games are still regarded as 'just games' and their creators are still considered 'business men' even after 20 years. Look at the authors of comics; they're referred to as 'sensei' (teacher) – with respect. Game designers are not referred to in that way, even today.

There was definitely a change when Sony came into the industry. R&D turned into 'creators'. Interviewing 'creators' started, and events and parties in the industry became a lot more popular.

Your love of movies is very evident in your games, particularly the *Metal Gear* series, can you ever imagine yourself stepping behind the camera at a later point in your career. Or do you feel that the flexibility of videogames will always give you more freedom with the visions you want to create?
I would love to direct a film in the near future. But don't get me wrong. I want to direct something that was always planned to be a movie. For me, directing a game and directing a movie is totally different. I strongly believe that games are games, and movies are movies. They are different things.

You're one of the few game designers who's universally recognised within the industry. How does this attention make you feel, and does it create pressure when you're working on new titles?
I think that nothing about me has changed. I do feel a little bit more responsibility though, I can't just run around and do whatever I

FEATURED GAMES

POLICENAUTS

Released in 1994, and reputedly taking five years to make, *Policenauts* – a portmanteau of police officer and astronaut – was a science fiction film noir, a detective story with designs on the 'mature' gamer. As was the norm back then, videogames that focused on adult themes were generally developed for the PC market, and *Policenauts* was originally released on the PC-98 and 3DO, and then later on the PSone and the Sega Saturn. Sadly, the game was never localised, which means in order to really get a handle on Hideo Kojima's unique vision, a fluency in Japanese is necessary. However, some dedicated chaps at Junker HQ have been working on transcribing the game for the last five years. And we don't envy them either because it's truly a mammoth undertaking. Depending on which version of the game you play, *Policenauts* comes with a weighty in-game encyclopedia that fleshes out the culture and the characteristics of its world.

SNATCHER

Snatcher can be seen as the spiritual precursor to *Policenauts*. The games are set in two different and very distinct worlds inhabited by very different people. Also, *Snatcher* feels less like a detective story and more like a first person action/adventure game. Its gameplay uses point-and-click style adventuring permeated with occasional shooting sections, and its story touches on the Illuminati and borrows heavily from the films *Blade Runner* and *Invasion Of The Body Snatchers*. The story centres on mysterious beings know as Snatchers, who steal the bodies of humans and use them as a host to blend discreetly into society. You play the role of Gillian Seed, and work for a special unit of rangers known as JUNKER who are assigned to draw out and eliminate the Snatchers at any cost.

PENGUIN ADVENTURE

The follow-up to *Antarctic Adventure* saw Kojima taking on the role of assistant director. *Penguin Adventure* is often regarded as one of the finest action games for the MSX, and it's easy to see why. It looks gorgeous, plays brilliantly and comes packed with a fantastic soundtrack. While from the outset the game seems to pander to kids, under the colourful exterior and playful gameplay is a surprisingly challenging game. Also, it somehow manages to cram itself with over 20 varied enemies and obstacles, and just as many quirky items and power-ups. *Penguin Adventure* is also one of the earliest games – alongside *Bubble Bobble*, which was released the same year – to have multiple endings. To view them make sure you only pause once during the game.

METAL GEAR

Most will probably be more familiar with the NES version of *Metal Gear*, which was published by Konami's US subsidiary Ultra Games, but fans should really try to track down the localised MSX version of Snake's first caper. Why? Well, Konami butchered the MSX original when it was translated to the NES. Most notable changes to the Nintendo conversion included different layouts for the levels, altered bosses – Metal Gear doesn't appear at all – and some exquisite examples of 'Engrish' that come to blemish Kojima's hard work. Konami's NES port was the most ported version of the game (appearing on C64, DOS and GameCube), which is probably why most fans resign themselves to look at it as more of a rearranged version of the original MSX game rather than simply a port that got heavily lost in translation.

HIDEO KOJIMA

FEATURED GAMES CONT.

METAL GEAR 2: SOLID SNAKE

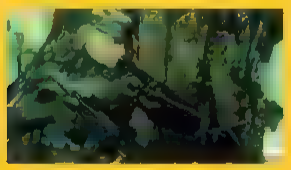
Owing that Kojima was sidelined for the development of *Snake's Revenge*, the first follow up to *Metal Gear*, plus the fact that Konami made numerous tweaks to the gameplay in a bid to make the game appeal more to Western gamers, *Snake's Revenge* is vehemently lambasted by fans of series. However, *Snake's Revenge* is not without merit, and Kojima himself has even stated to liking the game, believing it stays true to *Metal Gear* ideals. Shortly after the game's release, however, Kojima would get to work on his successor to *Metal Gear – Metal Gear 2: Solid Snake*, released for the MSX2. Alongside *Metal Gear Solid* on the PSone, *Solid Snake* would become one of the most popular games inside the *Metal Gear* canon, introducing many integral and popular characters – Gray Fox Campbell – who would all go on to become mainstays within subsequent games in the series.

METAL GEAR SOLID

After an eight year absence, Solid Snake would return to tactical espionage action with aplomb. David Hayter would give a voice to Snake and the power of Sony's first born would move Snake into a new dimension. *MGS* saw Snake return to the frontlines and face off against a new terrorist troupe of megalomaniac nutcases threatening to strike a nuclear attack on the world. *MGS* would also launch the franchise into the mainstream, and Kojima to stardom. What impresses most about this reboot of the *MGS* franchise is the script (although, from here on in it seems Kojima relies heavily on Deus ex Machina to tie plot elements together in the series), which is filled with intelligent dialogue spoken by non-cheesy voiceovers and loaded with cinematic and emotive cut-scenes.

METAL GEAR SOLID 2: SONS OF LIBERTY

For the *MGS* sequel, Kojima wanted to try to pull the rug from underneath our feet. In this period of Snake's life he's stronger than he's ever been in the series. No longer a rookie inside FOXHOUND, Snake had become the virtual embodiment of infallible doggedness. Understanding this, Kojima wanted to rattle things up and force fans to look at the character in a very different way. So, after a brief prologue mission, Snake saunters into the boots of side character, hidden under the transparent pseudonym Iroquois Pliskin, and we were assigned the swanlike FOXHOUND rookie Raiden. Raiden was an archetypal bishonen (beautiful boy) and his angelic and girly blond locks juxtaposed stupendously against Snake's tousled and carewom appearance.



METAL GEAR SOLID 4: GUNS OF THE PATRIOTS

While it's doubtful that Konami will pull the plug on the *Metal Gear Solid* franchise completely, *Guns Of The Patriots* has been earmarked as the final *Metal Gear* chapter for both Snake and Kojima. This one is certainly for the die-hards, with a plot with more wayward tendrils than *The Hair Bear Bunch* and intrusive cut-scenes matching the length of feature films. Perhaps owing that this is the first time Snake has embraced the wonders of online gaming, through *Metal Gear Online*, and it's also the first game in the series that doesn't force the player to rely wholly on stealth. But a final and fitting chapter it is – innovative, visually stunning, complex and self-indulgent, all the key characteristics that make the series as popular as it is today.

like any more – that kind of responsibility. I also feel that I need to help lead the industry as a creator, too. But at the same time this distracts me from my creativeness when I work on a game. I sometimes stop and think, "Hey, this idea might not be a huge hit." This is a little annoying at times.

Snatcher is one of your most filmic games and has a huge following with fans. Where did the concept come from?

I loved 'adventure games' I still do, but at that time I really wanted to create an adventure game. I wanted to create an extension to a text adventure. Many people say that *Snatcher* is like *Blade Runner*, but to me it could have been *Terminator* or *Alien*. Another challenge was determining how to put action into an adventure game. I had so much resistance from staff when I first explained this. "An adventure game doesn't have action!" they shouted (laughs).

The game is extremely gory in places, and has an intelligent, adult theme throughout. Did you face many problems over the game's release due to these adult themes?

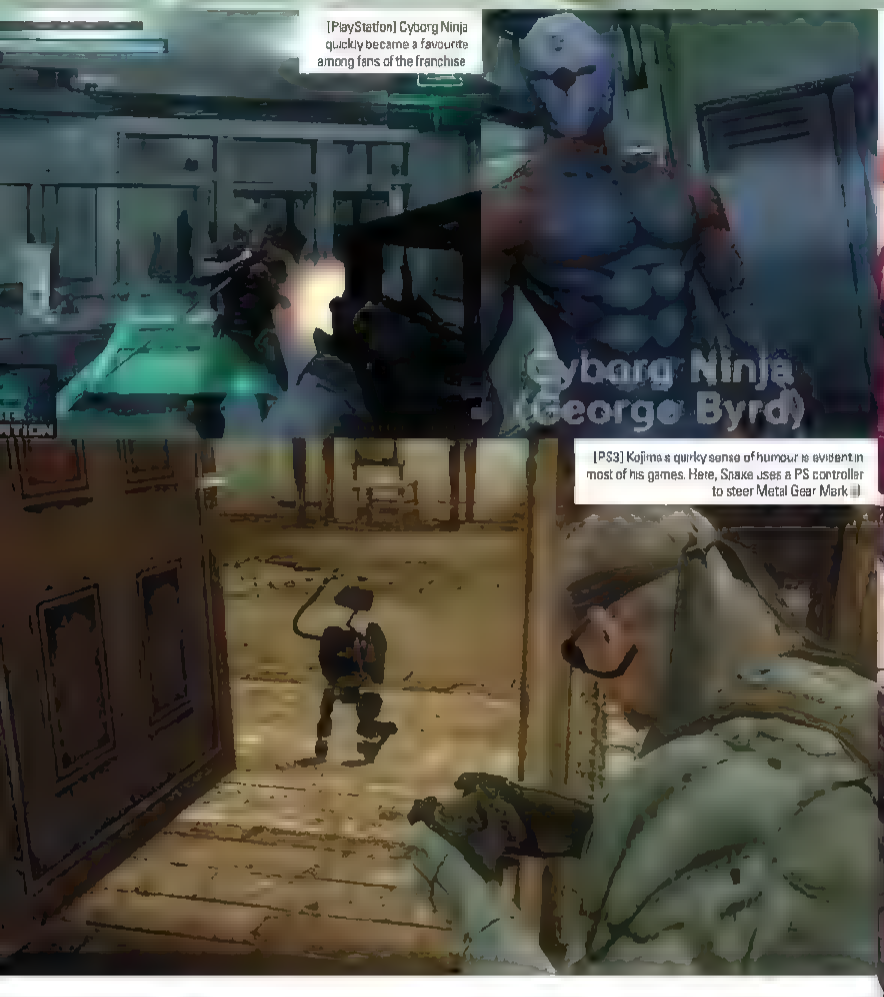
No, not really. It was planned for adults in the first place. It was for the PC, the PC-88 and went on to MSX2. It was certainly not aimed at kids. When it was ported to PC Engine, yes, some people moaned about it, but back then ratings were not as strict as today.

There have been many mentions of _Snatcher_ characters in recent _Metal Gear_ games, could you perhaps be testing the waters for a new game?

No, nothing like that. Mk II and the guy in the trench coat are from *Snatcher*, but I'm not thinking of testing (laughs). It's just a small 'thank you' to the fans that have long supported me.

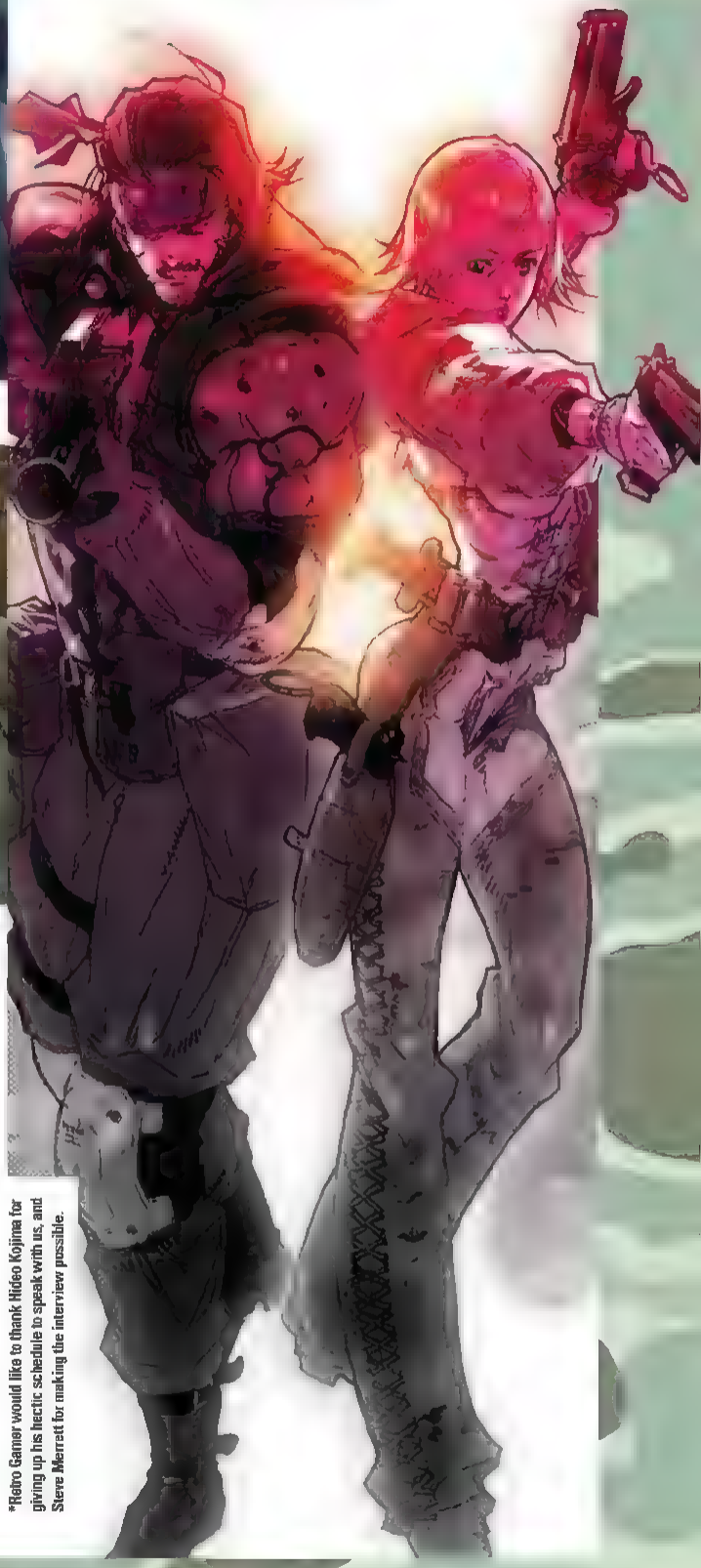
Where did the idea for _Policenauts_ originate from?

I have to go back to explain about when I started *Snatcher*. I was in my second year in the company. I had to create *Snatcher*



[PlayStation] Cyborg Ninja quickly became a favourite among fans of the franchise

[PS3] Kojima's quirky sense of humour is evident in most of his games. Here, Snake uses a PS controller to steer Metal Gear Mark II



from nothing. No tools, nothing. I drew a storyboard with five or six other people, but the project went nowhere. One day, the company said, 'What are you doing? If you can't create this game then make it in two parts!' The concept sheet was like an encyclopedia, it was that thick. So *Snatcher* was the first part of this project, but after a while, the company changed its mind, telling us we could only make the first part.

Snatcher's reputation was quite good, but our company moved out from the PC business, so I couldn't create the second part. For my next project I started something that I couldn't finish with *Snatcher*, adventure, drama and action combined. That was *Policenauts*. At the time, there was a shift in the company. I was stationed in Kobe with two other guys supervising the R&D group, that division was gone in a year, and then I moved on to the research for development group and I wanted to create a tool for an adventure game . that went nowhere. Finally, R&D No 5 was formed in Kobe. I was stationed there and we were creating the game. The next year Yoji joined the company and *Policenauts* was finally completed. I may as well finish this long story... *Policenauts* was created for many formats, PC-Engine, 3DO, PS, Saturn. During that time, I wanted to create *MGS*. But this wasn't possible in Osaka at that time. Osaka was responsible for creating titles for the Nintendo platform. A little after that, KCEJ was created in Tokyo and I became VP of that company which led me to create *MGS*.

Have you ever considered a sequel and if so, what form would you see it taking?
As I explained, I finished what I wanted to do with *Policenauts*. There was nothing more to add. Also, nowadays, adventure games are not so popular. I must admit, I still like adventure games, and I wish to create another one someday.

How is the *MGS* movie coming along?
Nothing to say at the moment. It is proceeding well, but I can't give you any details at the moment.

*Retro Gamer would like to thank Hideo Kojima for giving up his hectic schedule to speak with us, and Steve Merrett for making the interview possible.

遠くの稀で、エキゾチックなゲームを愛する人々のため

FULL OF EASTERN

A TRIP DOWN MEMORY LANE LIKE NO OTHER – GET LOST WITHIN THIS ARCADE CLASSIC

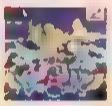
SALAMANDER DELUXE PACK PLUS

IN THE KNOW

- **PUBLISHER:** KONAMI
- **DEVELOPER:** IN-HOUSE
- **FEATURED HARDWARE:** SEGA SATURN
- **ALSO ON:** PLAYSTATION, PSP
- **GENRE:** SHOOT 'EM-UP
- **RELEASED:** 1997
- **EXPECT TO PAY:** £40+

CAN'T IMPORT? WHY NOT TRY...

PARODIUS (SEGA SATURN, PLAYSTATION)

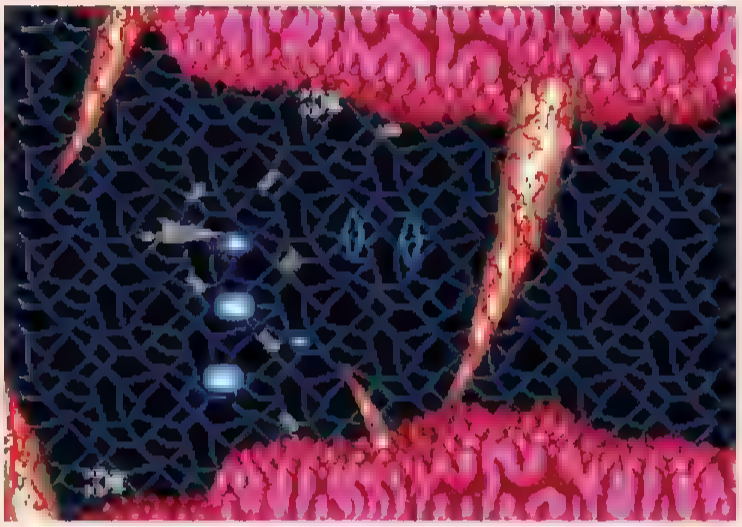


Konami has a long history of irking shooter fans by failing to release *Salamander* or *Gradius*-related console products in the West (the exceptions being *Gradius III* on the SNES and more recently *Gradius V* on the PS2). For reasons we've never been able to fathom, they were, however, happy to release the far more bizarre *Parodius* (read parody of *Gradius* compilation here, containing *Parodius Da!* and its sequel *Gokujo Parodius!*. Both games are like playing *Gradius* programmed by lunatics – but still manage to be utterly brilliant, particularly *Gokujo*. Unfortunately a limited release means it's nowadays quite hard to track down.

SUPER, SMASHING, GREAT...

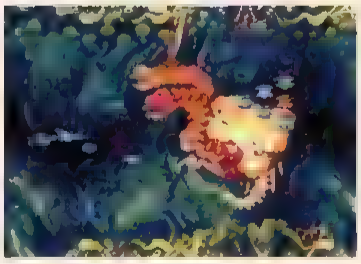
Konami's Saturn and PlayStation *Deluxe Packs* are now eminently collectable, so it's a shame they didn't make it out of Japan, bar the European *Parodius* compilation. The other releases in the series were *Gradius Deluxe* (with the Japanese releases of *Nemesis* and *Vulcan Venture*) and *TwinBee Deluxe* (with cute shooters *Detana TwinBee* and *TwinBee Yahoo!*). All come highly recommended by **Retro Gamer**.

There's a list of reasons as long as our arms as to why we love Konami's Salamander. Shooting a large pulsating brain-mass in the eye is one. Mike Bevan reveals a few more



メガ駆動機構

We can vividly remember the first time we clamped our eyes on a *Salamander* coin-op – a sea-front arcade during a summer jaunt to Weymouth, circa 1987. Familiar as we were with *Nemesis* (*Gradius*), Konami's shoot-'em-up still managed to elicit an awe-struck sigh as we inserted our 20 pence and launched into a cavernous alien intestinal tract complete with nightmarish fangs, uncanny expanding space raspberries and that famous first-level boss – a tentacle-armed, cycloptic floating brain. We'd discovered the HP Lovecraft of Eighties arcade shooters and it was love at first sight.



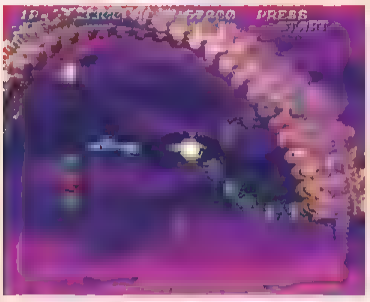
» [Saturn] *Salamander 2 – The Brain Strikes Back*

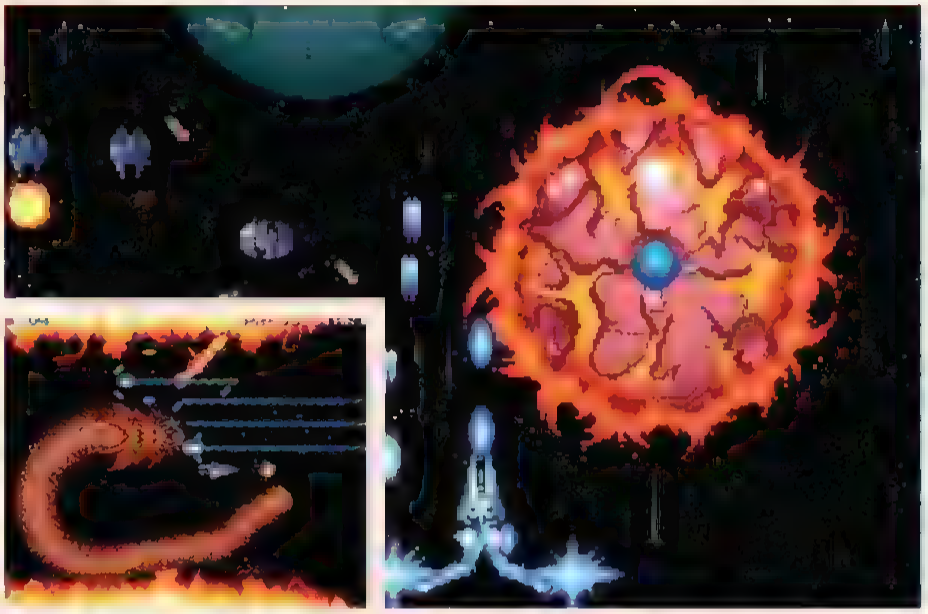
Later stages, which alternated neatly between vertical- and horizontal-scrolling affairs, similarly impressed, particularly the third level's leaping solar flares and 'roaring' fire dragon. This distinctive snake-like beastie would become an iconic feature of many a Konami shooter, along with *Salamander*'s signature 'ripple laser', a notably snazzy weapon that showered your enemies with radiating neon Hula Hoops.

Although we're still fond of Peter Baron's exquisitely adapted Commodore 64 rendition, and admire the sheer chutzpah of the PC-Engine conversion, it wasn't until the release of the *Deluxe Packs* on Saturn and PlayStation that we were able to revel in true, arcade-perfect *Salamander* loveliness, in the form of the original game and its Japanese cousin, *Life Force*. There was also the surprise inclusion of the then little-seen, graphically superior arcade sequel, *Salamander 2*. For like-

GAMES FROM THE EAST WHICH NEVER MADE IT TO UK SOIL

PROMISE





» [Saturn] The incredible opening stage of *Salamander 2*

minded fans, *Salamander Deluxe Pack* was a mouthwatering slice of arcade heaven, and a must-have import.

Though superficially similar to early outings of the *Gradius* series, *Salamander* chucked out the progressive power-up bar in favour of a straightforward pick-up system, and allowed players to carry on without a 'restart' following death, with the option of picking up scattered weaponry – a system reclaimed for the recent and truly brilliant *Gradius V*. And, of course, unlike *Nemesis*, it offered the chance to enjoy some simultaneous co-operative two-player shmupping. As a consequence, though, the game balance was geared towards two players being on-screen, flinging high volumes of homicidal sprites at you, and, despite the lack of restart points, making single-player progression a lot tougher than in *Nemesis*.

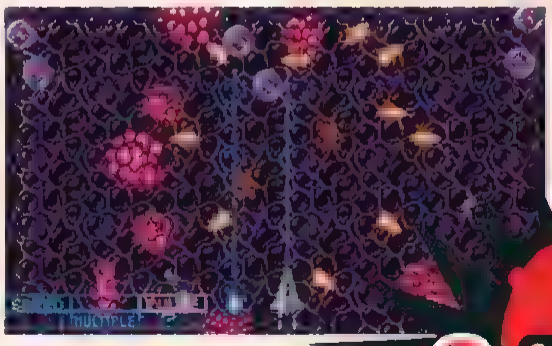
The second title in the pack, *Life Force* maintained the difficulty level of *Salamander*, being a graphically modified variant, which restored the weapon power-up bar and rejigged the stage backgrounds (and a number of bosses) to suggest a more unified (and far more garish) bio-organic theme. As a result, it looked a fair bit worse than the original and was less fun to play, despite some additional music tracks and speech. Confusingly, the game here isn't the same as the North American *Life Force* variant, which wasn't changed much from the original Japanese and European *Salamander* game.

Salamander 2, in contrast to its no-nonsense parent, veered a little towards the easy side, but thankfully remained a very attractive sequel. Using a mix of prerendered and hand-drawn sprites and backgrounds, with an eye-catching, almost anime-style appearance, it was, and still is, visually unique among Konami shooters. First impressions caused goose bumps on a similar scale to our initial encounter with its predecessor ten years previously. Negotiating a number of large, strikingly animated segmented worms and a colourful alien-encrusted labyrinth to arrive at a familiar showdown with a tentacle-toting brain, we were surprised by a dramatic twist involving an even larger end-of-level boss with a rather nasty set of laughing gear.

The juxtaposition of horizontal to vertical levels was a well-received nod to the original game, although the horizontal-scrolling stages had a tendency to stand out as visually superior and slightly more enjoyable. We're especially fond of a showdown with a deep-space enemy battle fleet, which included a reprise of the four-armed mechanical whirligig from the finale of the original *Salamander*'s second stage. Another standout level was a trek through an incredible parallax asteroid field, prior to infiltrating an enemy base constructed among the formations of floating rock.

A number of cosmetic tweaks to the weapon mechanics keeps *Salamander 2*'s gameplay feeling fresh. While the original game had you picking up floating 'options' merely as additional bullet drones, the sequel allows you to convert them into laser energy and fire them at the bad guys. Option pick-ups now come in two forms – full and half size. Holding down the 'option release' button with one or more full options will 'charge' them consecutively, unleashing any powered-up options as homing lasers when you let go. Half-size options produce a protective, circular laser strike around your ship. In practice, effective use of full-option laser blasting pays off nicely, as destroyed enemies liberate further option pick-ups, creating a sort of feedback loop of respawning pick-ups, which comes in very handy but somewhat tames the game's difficulty level. Crank up the default skill setting, and it'll prove fair challenge for any shooter fan.

On either format, *Salamander Deluxe Pack* is a very desirable package, and we're big fans of the wonderfully crisp Sega Saturn version. PSP owners have the option of picking up a recently re-released version of the compilation (sadly, Japanese import only) with the added bonus of the rarely seen and visually magnificent *Xexax* – surely the most stunning of Konami's Nineties arcade shooters. Way back in 1987, the idea of holding a *Salamander* arcade machine in the palm of our hand would have blown our tiny minds. Isn't technological progress great?



» [Saturn] *Life Force* provides a *Gradius*-style power-up system, and ups the raspberry count.

私を読み、私に書くことができ、私に知らせれば好みのゲームはある

DEVELOPER LOOKBACK

WHEN SID MEIER AND BILL STEALEY DECIDED TO SET UP THEIR OWN GAMES PUBLISHING COMPANY, IT WAS NO FLIGHT OF FANTASY. THE PAIR WERE CONFIDENT MICROPROSE WOULD SUCCEED, AND IT DID, FOR NEARLY TWO DECADES, AS DAVID CROOKES RECALLS IN THE FIRST OF A TWO-PART SERIES

MICROPROSE (Part 1)

Most of MicroProse's box artwork was similar. A simple picture framed by a border with the unmistakable logo meant fans of the company could instantly spot the games on the shelf

Back in 1982, Sid Meier was smug. Or, to be exact, 'SMUGGER'. It may appear that Retro Gamer has suddenly become very rude towards the programmer behind *Civilization*. But no. We're stating an absolute fact...

Meier was an employee at electronic component manufacturer General Instrument. He was a young and talented programmer and, having bought his first computer, an Atari 800, he was starting to produce his own games – albeit primitive ones – in BASIC.

At the same time, a gentleman by the name of Bill Stealey was working his way up the ladder in the financial department of the very same company. His real desire, however, was to be an entrepreneur. But as a smart graduate from Wharton – one of the top three business schools in the United States – laziness had meant he had ended up working for somebody else, although he was constantly keeping his eyes peeled for opportunities.

In the early-Eighties, an industry was growing. Bill had gone to General Instrument as a director of strategic planning. That meant he had to deal with lots of financial documents and calculations and, being smart but not wanting to do drudge work, Bill wanted to find a way to create those financial documents more easily. He discovered one of the first spreadsheet programs, VisiCalc, and looked for a computer to use it on.

Among the computers he looked at was Tandy's TRS-80 microcomputer – which had been selling well to hobbyists, home users and small businesses from the late-Seventies – a machine boasting 4KB of memory and a Z80 processor. He also noticed an Atari 400 and asked what it was, since the Atari was demonstrating an early game known as *Star Raiders*. Bill was a big *Star Trek* fan and was impressed with the game. Since the Atari ran VisiCalc as well as games, he went on to buy the Atari 800,

Like many of MicroProse's earlier titles, *Airborne Ranger* was heavily influenced by military themes.

Stunning graphics marked out MicroProse games from the competition as *F-15 Strike Eagle* shows.

C64! *Conflict In Vietnam* was a game close to Bill's heart since he had lost friends in the Vietnam War

MICRO PROSE

Sid Meier is one of the most respected game designers in the world – and he says his main influence was his imagination as a child. He would spend many hours building his own worlds in his head.

Sid also found it fascinating to watch the trains, which went by his grandparents' house. The history of the railway system and the punctuality of the trains gave him an idea for a later game.

The first game Sid produced and sold was a *Space Invaders* clone. He printed the manual direct from his printer and popped it together with the disk into a plastic bag. He sold less than a dozen.

Bill Stealey is highly intelligent. Now aged 61, he is a retired United States Air Force Lt Colonel and Command Pilot as well as a graduate of the United States Air Force Academy and the Wharton School of the University of Pennsylvania – one of America's finest.

Sid and Bill started MicroProse in 1982 – with a game called *Hellcat Ace*. Bill's aviation background prompted him to make annual requests to Sid to make further popular flight simulators.

Bill hoodwinked retail stores into carrying MicroProse's initial games – pretending to be a customer asking for the firm's games to drive up demand then stepping in to feed the apparent insatiable appetite.

Bill's ruse worked. Before long, the company was employing more people. By 1988, it had 250 workers, and games such as *Pirates!*, *Solo Flight*, *Silent Service* and *F-15 Strike Eagle* behind it.

It had also opened up offices across Europe with the most notable being in the UK, headed by Stewart Bell. It created gems such as Geoff Crammond's *Stunt Car Racer*.

MicroProse liked to put people's names before a game's title. It created a fan base that was great for marketing.

Bill still flies his own T28 Trojan WarBird. Sid doesn't make flight simulators any more.

which was packed with 16K of memory (48K if you added the basic cartridge).

"I wanted to discover more about what this computer could do," explains Bill, "and I came across an Atari user group which was pirating games. The guy who ran the group wasn't interested in the financial things that the computer could do but he was looking at the technology behind the games on the computer. It became apparent that he was gathering knowledge to use in his own games. He was called Sid Meier."

That group was the Sid Meier User Group. Or SMUGGERS for short. Bill soon became friends with Sid, whose first computer was also an Atari 800. At a General Instrument company meeting in the MGM Grand Hotel in Las Vegas Sid decided he had had enough and invited Bill to slip out with him. "We went downstairs," recalls Bill. "There was a flight simulator there called *Red Baron* and I challenged him to a game. He beat me but I remember Sid saying 'I could programme a better game in a week!'"

Sid felt the AI of the enemy was too predictable and he had memorised the algorithms watching Bill play the game first. Bill bragged back. "If you do, I could sell it," he said. Sid produced a combat flight simulator called *Hellcat Ace* about three months later. Bill was surprised by the development and took the game to review. Bill did not want to have to live up to his boast and decided to review the game badly. Bill wrote a four page bug-and-change list, and gave it to Sid thinking that would be the end of the discussion. Sid brought the fixed product back and asked Bill, "Can you sell this?" That was in August 1982.

It wasn't Sid's first game, however. He had actually been playing around with computers since the early Seventies, starting with an IBM 360 mainframe on which he learned Fortran programming. He produced simple offerings – space titles and a tic tac toe game. He used his Atari 800 to produce a *Space Invaders* clone (the first game he sold – albeit around a dozen copies) and he had also created a racer called *Formula 1*, which was distributed by Acorn in 1982. But *Hellcat Ace* was his first important release, which, along with the side-scrolling arcade game *Chopper Rescue*, helped Sid and Bill's new company, MicroProse, to take off faster than the aircraft in their hot new games.

"I called up computer shops and asked them if they had any copies of *Hellcat Ace*," Bill laughs. "I would get a negative answer and then hang up. I'd repeat this a few times and then I'd call, as myself, some time later telling the shops that I had copies of *Hellcat Ace* for sale. They'd tell me: 'We've had lots of enquiries for that game, sure we're interested.' And that's how the sales began."

Bill worked to build up the company in his spare time. He would spend the day at General Instrument and the night, from 6pm to midnight, ensuring MicroProse was a viable company. A year and $200,000 later, he went full-time but it would be another 12 months before Sid quit his job to join MicroProse in the same capacity. In that second year, MicroProse employed three further workers – including Sid's first wife, Leslie.

Sid's love of creating flight simulators was perfect for Bill, who had a side career as a fighter pilot with the US Air Force Reserve. It was this mutual love of flying which caused the pair to bond. Sid also knew how to put together great games while Bill had the ideal background to market them. Some may have accused the MicroProse games of being overly militaristic with a jingoistic air about them, but there was no doubting their attention to detail.

Bill's military background helped on another level, too. Bill – who was known as 'Wild Bill' from his time at the USAF Academy in Colorado due to his lacrosse style of play – was the outgoing partner in the business, Sid being noticeably shier. The pairing worked wonders and

LAWSUITS

In 1988, MicroProse was being threatened with a lawsuit by MicroPro, makers of the word processing program WordStar. The company was claiming that MicroProse had been causing market confusion by adopting too similar a name.

"We actually got calls from members of the public asking for help with WordStar," admits Ed Magnin, one of MicroProse's programmers at the time. "MicroProse's spokesman, Mike Harrison, told the press that it had until 16 June 1988 to start using a new name although it was allowed to use the words, formerly MicroProse Software up until June 1991."

However, MicroPro was bought by another company and MicroProse didn't have to change its name after all.

GUNSH...

Whenever MicroProse advertised its games in the early days, it would include details of how to buy the title by post.

the regimented approach Bill had towards business was the driving force behind MicroProse's success.

"I'm a fighter pilot. I have the mind-set that you're not going to get shot down, that you're going to accomplish the mission," says Bill, who lost friends and classmates in Vietnam. "So I just worked out how to make MicroProse work and went for it. We were building a product, making that product and lining up people to convert it. Then we were selling it."

And sell they did. In 1983, MicroProse produced the *Floyd Of The Jungle* game, which allowed four joysticks to be hooked up to the Atari 800 for multiplayer fun. "For me, it was like early Activision games," says Bill. "I liked it because I had three kids and all four of us could play together." *Floyd Of The Jungle* was not a great commercial success but it did move MicroProse Software along.

More success was to come in June 1984 when Sid's latest game, *Solo Flight* – in which the player flies over many States and delivers bags of mail – was given its first airing. Bill was at the Summer Consumer Electronics Show in Chicago, Illinois, having booked a ten by ten booth. The game began to catch attention, not least from US developer and publisher Human Engineered Software, or HESware as it was better known. It offered $250,000 for *Solo Flight*. Bill asked Sid what he thought about the offer.

"Sid would always say to me, 'I had 'hired' a Wharton MBA to make those difficult decisions'," says Bill. "But this time he continued and told me: 'I heard you never give away the family jewels!'" Bill decided to keep *Solo Flight* for MicroProse, HESware went bankrupt within months, and Bill and Sid went on to sell more than $1 million of *Solo Flight* for MicroProse.

Still, all Sid wanted to do was programme. He wasn't interested in the running of MicroProse and devoted himself to creating the very best games he could. This was a time when titles didn't require obscene sums of cash to be thrown at them; a time when a programmer only had to think of a topic and base a game around it. "We could experiment," says Sid. "There wasn't a lot of money at stake in the individual titles so we could take risks that today would not be possible."

Other programmers noticed Sid's devotion. "You start a restaurant because you love to cook, but then you quickly find out there's a lot more than cooking to running a restaurant," says Ed Magnin, a programmer hired by MicroProse in 1986. "And that was the same with Sid. He started a games company to make games. He didn't want to run a software department, supervise other programmers, or worry about sales. What's more, Sid had a knack for playing other games and guessing how they might have implemented some features. He liked to experiment between game projects and come up with some new tricks he could use in the next game. Many designers start as artists and then ask others to create the technology. Sid created some snazzy new technology first and then figured out how to create a game to capitalise on it."

Ed started at MicroProse creating Apple II games. "When I was at MicroProse I felt like I was a second-stringer or on the junior varsity team," he says. "When we

US GOLD

US Gold boss Geoff Brown gives us his recollection of MicroProse. "MicroProse was among the companies I first signed up for publishing in the UK under the US Gold brand. Apart from a couple of early chopper-based products from Cosmi, I didn't really have any flight sims for the C64 or Amiga that were anything like realistic. Over on the PC they were big business with *Flight Simulator* and the add-on disks. I actually did the deal for the rights to publish with Bill Stealey who founded and ran the company and provided the ideas.

Bill was a larger than life, in your face, brash American who actually wore a military uniform to the first CES shows. I always saluted him when I met him. To most Brits he seemed like an ex-combat guy/flier and he was usually accompanied by his wife. He was always calling and asking how sales were going and was generally more pushy than my other licensors, but we all respected that and really went to town to make the sales for him.

"I don't remember the product release exactly, but among the first were *Solo Flight*, *Spitfire Ace* and the million-selling *F-15 Strike Eagle*. He really helped to put US Gold on the map and extend our product range into new areas. They eventually opened their own publishing division in the UK, but I believe it was our sales and marketing that helped to position them at first."

While it wouldn't win any architectural awards, this building was home to MicroProse in 1988 in the US.

finished a PC game we had a party in the warehouse and broke out the cake and champagne. When we finished an Apple II or Apple IIGS game, they said here's $25, take your wife out to dinner."

Meanwhile Sid was beginning to tire of military games and yet they were helping to make his name. His fan base was growing strong which is why, in 1987, MicroProse decided to launch a pirate simulator with Sid's name in the title.

Sid Meier's Pirates! aimed to pick up fans of the programmer's earlier games and it proved to be massively successful, ported on to many systems over the following five years. The fans adored it, but Bill seldom missed a chance to give Sid's fame a peg up. Following an Amiga conference in San Francisco, Bill and Sid were having dinner. Bill told the maître d' to ensure fellow diners would not bother Mr Meier, the author, who just wanted a quiet meal without the bother of autograph hunters. By the end of the night, Sid was inundated with people asking him to sign their napkins.

By 1988, MicroProse had grown and it now employed 250 workers. Sid continued to work on games but MicroProse could now devote resources to multiple projects. "We all learned a lot from Sid, especially those who worked 'porting' or 'translating' his games from the Commodore 64 to other platforms," explains Ed. "We got to see his code and how he did things. Many of us went on to work for other top companies."

Despite the fame and adoration from fellow programmers, Sid remained shy. "I was at lunch with Sid and some of the programmers asked him to fix a bug," says Ed. "Rather than tell them he was busy eating, he went to his office and came back five minutes later. I commented that he'd just made the fastest bug fix I'd ever seen. He said 'Hey, I was hungry'. I got the impression he just hit the 'build' button to rebuild the same game and then went back to fix it after lunch. This, to me, was an example of him being a shy guy who didn't want to tell the testers to come back after lunch."

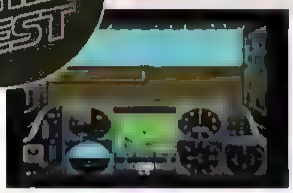
In the same year – 1988 – Bill had spent six months talking to Trip Hawkins who, in 1982, had left Apple to form Electronic Arts. The two self-confessed big egos were discussing strategy, with Trip Hawkins eager to move into Europe, a territory into which MicroProse was making inroads. But Trip had another trick up his sleeve – EA was in the midst of reverse engineering the Sega Mega Drive.

The firm was miffed that it would have to pay big royalties to Sega to make Mega Drive games. So to avoid all legal issues and to not have to pay royalties, EA decided to reverse engineer the Mega Drive with its own engineers and no help from Sega. At the same time, EA decided on its sports game strategy and, with no Sega royalties to pay, was able to quickly build the company. These two efforts by EA really got them off the ground in a big way. It was a strategy MicroProse didn't want to emulate.

"That turned EA into a successful company. They grew to have 23 per cent of the Mega Drive market," explains Bill. "I am a US Air Force Academy Graduate and we have an honour code which prevented me from allowing MicroProse from going down the same path. That was not the very best business decision on our part though."

Still, the push in Europe was going well. Talks had been conducted with Geoff Brown, owner of Birmingham-based US

SIX OF THE BEST

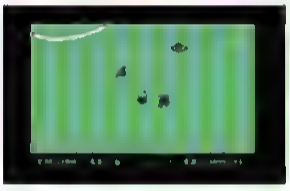


Gunship (1986)

Gunship works well as a flight action game. Admittedly, it has aged a lot – some of the keyboard functions are not that reliable either – but it was a great introduction for newcomers and it was underpinned with the most gorgeous graphics. "It got us big in Europe," says Bill. "Trip Hawkins apparently said that anyone could sell *Gunship*. He was saying we were not that good, we just had a great product."

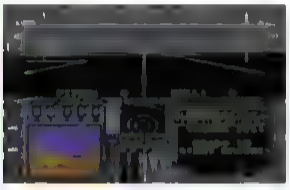
Sid Meier's Pirates! (1987)

Pirates! was a smash hit, drawing on Sid's growing reputation by including his name in the title. Starting off on the C64, it let you taste life as a privateer in the Spanish Main, taking a novice swashbuckler and making him a legend. As a departure from MicroProse's flight sims, it was disliked within the company but its success won over the doubters. Gamers just adored the delicious blend of action, planning and trading.



MicroProse Soccer (1988)

Along with *Emlyn Hughes International Soccer*, *MicroProse Soccer* was part of the 'big two' in the late-Eighties. The overhead view allowed players to get a great feel of the action and it was packed with features. Curl balls, replays, changeable weather and end-to-end play with silky skills, this was an undoubted UK success story for MicroProse.



F-19 Stealth Fighter (1988)

This game was a prime example of the detailed packages MicroProse often created. The glossy manual filled you in on the delights of being a fighter pilot and the cardboard cutout keyboard overlay made playing easier. Whichever mission you were on, you had to master the flight and it wasn't easy, requiring a lot of skill as you penetrated further into enemy airspace.

M1 Tank Platoon (1989)

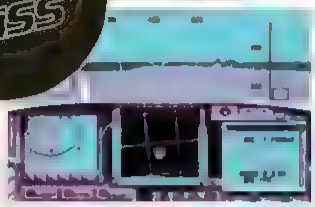
With 500,000 sales, *M1 Tank Platoon* was a brilliant 3D tank warfare tactical sim. You were put in control of four M1 tanks and had to mix strategy and first-person tank warfare to teach the enemy a lesson. You had the choice of a single mission or a campaign. Completing missions in campaign mode had an effect on future missions as the game read your skill level.

Stunt Car Racer (1989)

When asked what marked *Stunt Car Racer* out among its peers, you could answer speed. But it was also massively innovative, with races taking place on an elevated racetrack. The eight circuits also had troublesome gaps that you had to avoid unless you enjoyed plummeting to earth. Atmospheric and novel, the game was released on MicroProse's MicroStyle label.

DEVELOPER LOOKBACK

ONE TO MISS



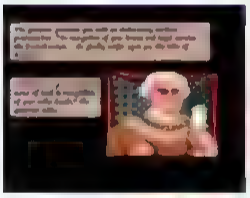
F-15 Strike Eagle II (1989)

Although Bill Stealey says *F-15 Strike Eagle* in 1985 established MicroProse as a major developer the sequel, despite similarities to *F-19 Stealth Fighter*, was too easy and simplified. The relentless enemy bombardment proved too much at times and with this reliance on repetitive gameplay, the game becomes more of a test of endurance than anything else. On the positive side, the action is high tempo with enemies coming thick and fast. Put alongside other MicroProse games, though, something just seems lacking.

MicroProse games were ported to a large number of machines, even the C64's rival, the Amstrad CPC.

Gold and, in 1986, the company began to sell MicroProse's games in the UK and on the continent. "There was a problem, though," recalls Bill. "I flew to the UK and went to see Boots, but they wouldn't take my meeting. The bosses there didn't know the MicroProse brand, and that's because every one of our games had US Gold plastered on the front of the box. I knew I had to change tact – if I couldn't get a meeting with a major supplier something was wrong."

The US Gold deal was brought to an end and in came Stewart Bell to head up a new UK division. By this time, the company had released a wealth of top games including *Gunship*, *F-15 Strike Eagle* and *Silent Service* and it was looking to open up in other countries. Soon it would have offices in France, Japan and Germany too but the large glass-fronted UK office, in Tetbury, Gloucestershire, was important and helped to create some of MicroProse's best games. Indeed, 40 per cent of the worldwide MicroProse transactions were controlled from the UK. It had a telesales department, a 20,000-square-foot warehouse shifting a million units a year and a playtesting section. Stewart was the UK's managing director and it signaled a period of further growth for MicroProse.



[Amiga] A departure for Sid but a successful one, it marked a slight change in direction for MicroProse.

Despite this expansion, however, there was still some criticism. The games themselves were notable for their quality but the prices were often high. Stewart says this was due to the investment made in the games. "*Gunship* cost $4 million and took over 17 man-years to develop," he explains. "The final packaging and documentation was of a very high quality and was always well researched."

As if to underline the emphasis on quality, *Gunship* was 18 months late, testament to MicroProse's stance that games wouldn't be released until ready. The game also ensured it rewarded high scorers – an in-game winner of the Congressional Medal of Honor would be handed a certificate signed by Bill and they would be rewarded with a flight in Bill's T28 Trojan, a World War II-era Navy training aircraft.

Such attention to detail and care for customers meant people knew they were getting value for money. Indeed, the packaging was immense – it was not unknown to have accompanying booklets stretching to 150 pages or more. This put off pirates too, and sales were buoyant. *F-15 Strike Eagle* sold a million copies across formats. But work didn't stop there.

"Many companies release a product and then forget about it," Stewart told *Crash* magazine at the time. "MicroProse's product development is a constantly ongoing process, which lasts between one and two years. *Project Stealth Fighter* is currently in its eighth version, utilising faster algorithms and improved gameplay, while the latest version of the C64 *Pirates!* has animated pictures."

Still, if some programmers had their way, the games would have been even more expensive. "I never understood why we would sell tape games for £9.99 when they were so much trouble to produce and disk games – which were much easier – for £15.99," says Ed Magnin. "I always felt we should have priced the two the same or swapped the prices to encourage people to move to disk."

But things were going well. There was belief within MicroProse that they and EA would grow powerful enough to carve up the games market between them.

MicroProse began to bring in new staff. It employed Bruce Campbell Shelly, Arnold Hendrick and Lawrence Schick, from board game company Avalon Hill as programmers and producers. It also took on producer Ed Bever, a PhD history professor from Princeton. Sid, who by now was settled near Baltimore, Maryland, was quick to spot their potential.

MICROPROSE TIMELINE 1982-1989

1982 MICROPROSE IS FOUNDED BY SID MEIER AND BILL STEALEY.

1983 MICROPROSE PRODUCES MULTI PLAYER ATARI 800 GAME, FLOYD OF THE JUNGLE.

1983 HELICAT ACE FLIGHT SIMULATOR AND CHOPPER RESCUE ARE RELEASED.

1985 SOLO FLIGHT AND F-15 STRIKE EAGLE ARE RELEASED.

1985 SILENT SERVICE, NATO DIVISION COMMANDER, CONFLICT IN VIETNAM, CRUSADE IN EUROPE AND DECISION IN THE DESERT ARE RELEASED.

1986 A DEAL IS STRUCK WITH US GOLD TO DISTRIBUTE MICROPROSE GAMES IN EUROPE.

1986 GUNSHIP IS RELEASED.

1987 SID MEIER'S PIRATES, AIRBORNE RANGER AND F-19 STEALTH FIGHTER ARE RELEASED.

1988 MICROPROSE BUYS THE FIREBIRD AND RAINBIRD LABELS FROM BRITISH TELECOM AND DWINTER GAMES AND RICK DANGEROUS ARE RELEASED.

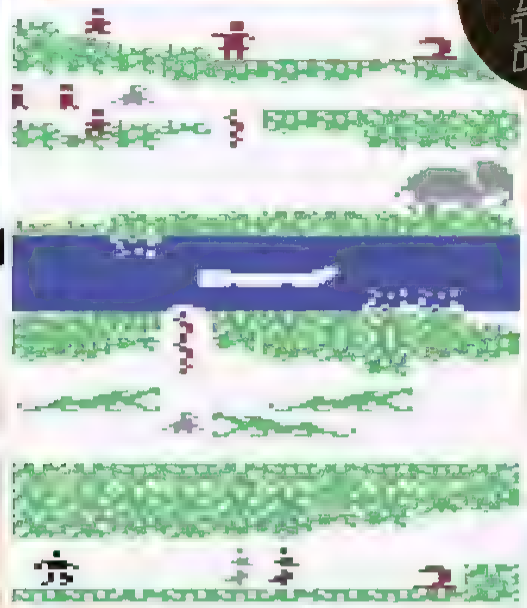
1988 MICROPROSE EMPLOYS 250 WORKERS.

1988 MICROPROSE SETS UP OFFICES IN THE U.K.

1988 MICROPROSE IS TOLD BY MUSICPRO, VIA LAWSUIT, TO FIND A DIFFERENT NAME.

1989 UK TITLES MICROPROSE SOCCER AND GEOFF CRAMMOND'S STUNT CAR RACER ARE RELEASED.

1989 F-15 STRIKE EAGLE II RELEASED.



C64! A favourite of Bill Stealey, *Floyd Of The Jungle* allowed four people to play it.

WHERE ARE THEY NOW?

Sidney K Meier
Sid Meier co-founded Firaxis Games in 1996 with Jeff Briggs and Brian Reynolds. He is currently Firaxis's director of creative development. *Civilization* remains his key work. *Sid Meier's Civilization Revolution* was released this year and is the latest in what have become near annual releases of this most successful franchise. Other recent games include *Sid Meier's Railroads!* in 2006 and *Sid Meier's Pirates!* for Xbox in 2005. In 2004, he celebrated 20 years as a games designer. He was the second person ever to be inducted into the Academy of Interactive Arts and Science's Hall of Fame for Lifetime Achievement in 1999.

Bill Stealey
Bill Stealey founded Interactive Magic in 1995 but left the company – which became known as iEntertainment Network – in 1999. He was asked to return as CEO in 2002. He currently runs the online game *WarBirds* at www.totalsims.com. But, more recently, he has set up Thriller Publishing, which will focus on multiplayer military and espionage-themed games with a focus on first-person shooters, action adventure, strategy and simulation. Bill says he is assembling many of the old MicroProse crew for this new venture, which will be creating titles for the PC, consoles, mobile gaming and online.

"SID DECIDED TO CREATE RAILROAD TYCOON AND CIVILIZATION AND, IN DOING SO, ALTERED STRATEGY VIDEOGAMING FOREVER"

In particular, he struck up a partnership with Bruce Campbell Shelly. They worked on *F-19 Stealth Fighter* together, with Bruce spending much of his first 12 months at MicroProse on the project. Bruce was a fan of *Pirates!* on the Commodore 64 and it was this game which made him keen to move out of board games and into computer games, a decision which would prove crucial as MicroProse headed into the next decade.

"This was our golden age," says Sid. "We had a brilliant set of people, the best programmers and artists, people who could really pull games together."

Indeed, MicroProse was always keen to try new markets. In the UK, the team produced the hit sports game *MicroProse Soccer*, and Geoff Crammond's *Stunt Car Racer* was winning new audiences. And when Amstrad announced the new Sinclair PC 200 in 1989 – a machine derided for being too much of a business computer that couldn't compete with the Atari ST and Amiga – MicroProse nevertheless decided to release new games for it and pushed Walt Disney and Sesame Street licences at a price of £9.99 each.

But such departures didn't always work. The Sinclair PC 200 was a failure, although it didn't damage MicroProse. What did damage the company's fortunes, however, was a decision to move into the arcade coin-op market. At the same time, Sid, despite opposition within the company, decided he too wanted to broaden his horizons and try a fresh approach to gaming. Bill wasn't overjoyed at this – he felt the formula of producing a military sim each year was a winner.

Unbeknown to most of the company's employees, Sid had actually sold his share of the company to Bill. As part of the sale, Sid was retained as a private contractor on an exclusivity deal, which tied him into producing games only for MicroProse. He would receive an advance before he began any game, another sum upon completion and royalties.

Now he wanted to move away from churning out flight simulators. He decided to create *Railroad Tycoon* and *Civilization* and, in doing so, altered strategy videogaming forever. As for MicroProse, it entered its second era of success.

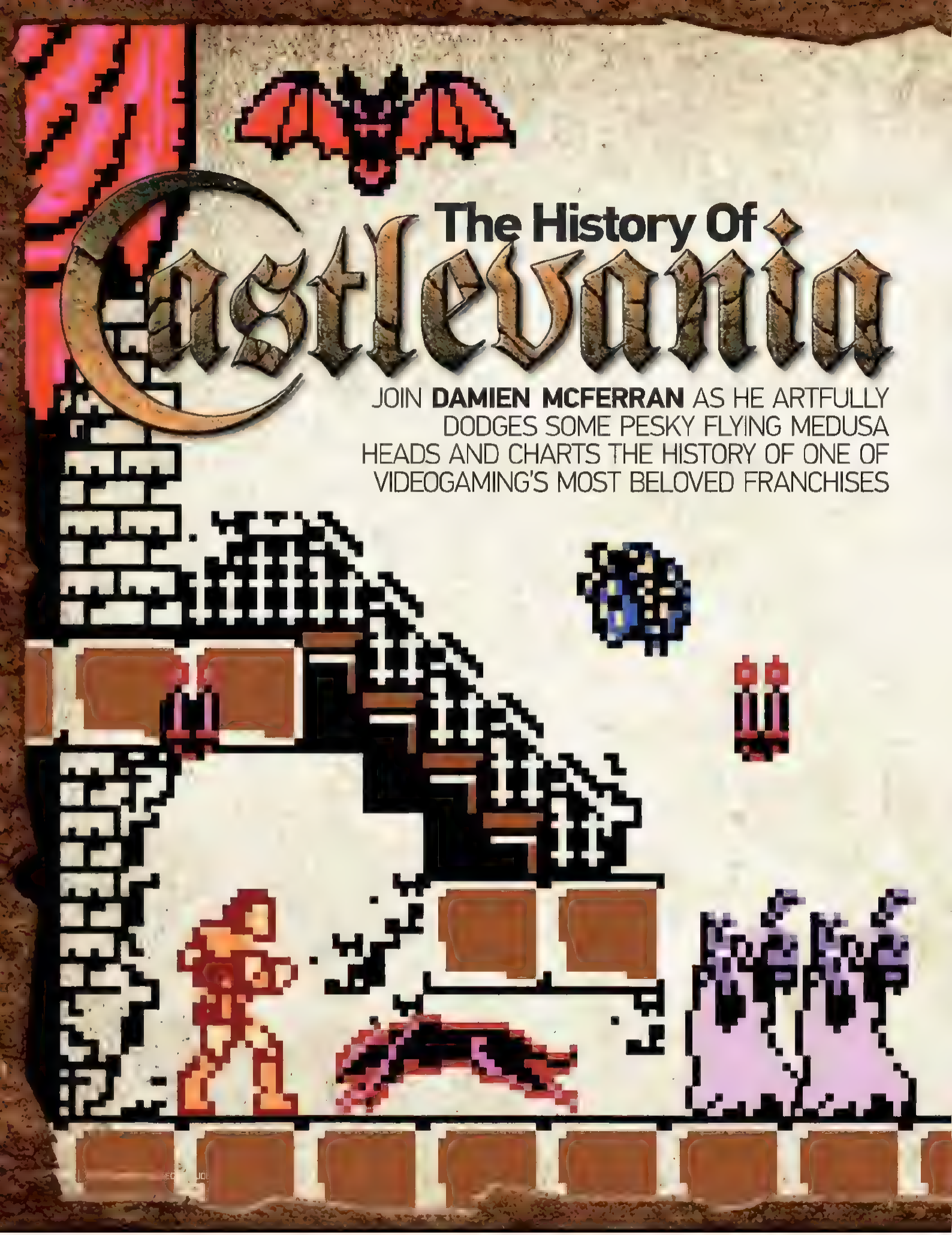
[Atari ST] Simulation Software sums up MicroProse's approach to gaming as with *Airborne Ranger* on the Atari ST.

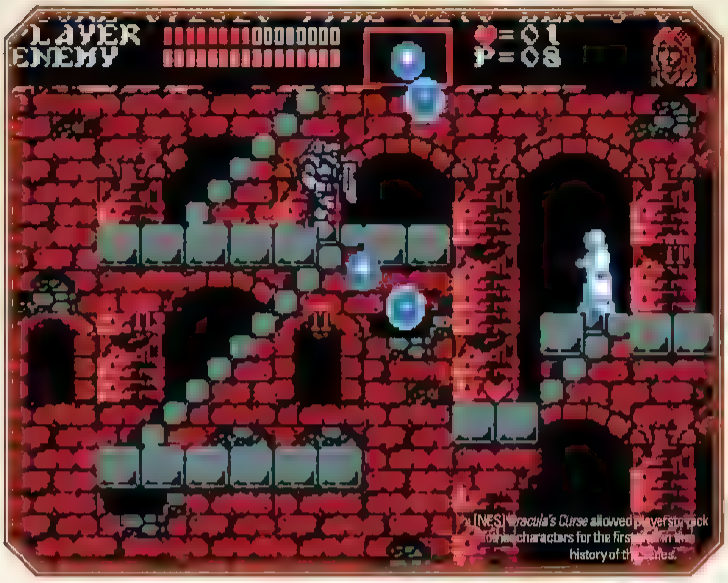
Programmer Kevin Buckner with a MicroProse van. Kevin worked in both the US and UK, one of many to have flown across the Atlantic to work at both English-speaking divisions. MicroProse intended all of its divisions to work as a single whole.

TURN TO PAGE 130 FOR PART 2 – TURN TO PAGE 130 FOR PART 2 – TURN TO PAGE 130 FOR PART 2 – TURN TO PAGE 130 FOR PART 2

The History Of Castlevania

JOIN **DAMIEN MCFERRAN** AS HE ARTFULLY DODGES SOME PESKY FLYING MEDUSA HEADS AND CHARTS THE HISTORY OF ONE OF VIDEOGAMING'S MOST BELOVED FRANCHISES





[NES] *Dracula's Curse* allowed players to pick from characters for the first time in the history of the series.

Ayami Kojima's lush artwork for *Curse of Darkness* really helps set *Castlevania* apart from other videogame series.

When Bram Stoker penned his classic horror novel *Dracula* in 1897 it's unlikely that he could have foreseen the incredible impact it would have on contemporary popular culture. Since its publication the book has gone on to become one of the most significant pieces of literature ever written and has inspired numerous movies, TV series and comic books, as well as establishing an entire horror genre. However, not in his wildest dreams could Stoker have anticipated that his seminal work would also provide the foundations for one of the most enduring videogame franchises of all time: *Castlevania*.

Although Konami's classic series features Stoker's legendary vampire antagonist and even goes as far as to tie itself in with the tumultuous events of his novel, the main focus is the seemingly unending duel between the forces of good and evil – namely the bold and courageous Belmont clan and malevolent Count Dracula himself. At the last count the series has spawned almost 30 different entries across a myriad of consoles, home computers, portable devices and mobile phones, and with the recent releases of *Castlevania: Order Of Ecclesia* and Wii fighting game *Castlevania Judgment*, and the incoming *Lords of Shadow*, we thought it was the perfect time to look back on the illustrious history of this classic gaming franchise.

Fangs For The Memories

As is the case with many classic Japanese videogame series, *Castlevania*'s genesis took place on the Nintendo Famicom (known as the Nintendo Entertainment System in the West). Released in September 1986 for the Famicom's Japan-only 'Disk System', the first game *Akumajo Dracula* (which is one of the many Japanese titles for the series and roughly translates as 'Demon Castle Dracula'), didn't really do a great deal to set itself apart from the flood of similar platform action titles available on the 8-bit machine at the time. However, it did boast one vital ingredient that other, more kiddie-friendly games lacked – atmosphere. From the foreboding visuals to the mean and moody soundtrack, *Akumajo Dracula* was as tense and spooky as any 8-bit videogame possibly could be. It was also incredibly challenging, with Simon Belmont – the game's protagonist – famously unable to jump off the many staircases that were dotted throughout Dracula's dusty abode.

Shortly after its Disk System debut, *Akumajo Dracula* was ported to the popular MSX2 home computer. Konami had a history of supporting this platform, with titles such as *Metal Gear 2*, *Snatcher* and *Hyper Sports* all appearing on it, so conversion wasn't that much of a surprise at the time. However, it's worth noting that the MSX2 version marks the European debut of the franchise (the MSX series of machines had quite a following in this region at the time), although it was published under the title *Vampire Killer*. In all honesty the MSX2 edition isn't a port in the strictest sense; it actually featured new areas and was structured differently, with emphasis placed on exploration rather than out-and-out bloodletting.

Given the success of the Disk System version, Nintendo decided to release *Akumajo Dracula* in cartridge format in 1987. In the same year *Akumajo Dracula* made the leap from East to West and was retitled *Castlevania*, with a European release following in 1988. The timing of the Western publication was perfect – the NES was effortlessly dominating the American market and this meant that quality games were likely to find a massive (and highly lucrative) audience. *Castlevania* was no exception to this and sold impressively, quickly establishing itself as a NES classic.

Konami's next move was an extremely brave one. At a time when most developers would slavishly stick to a blueprint once it had been proven successful (Capcom's dangerously similar *Mega Man* NES titles are a good example of this), the developer decided to make the inevitable sequel quite different from its predecessor. *Castlevania II: Simon's Quest* continued the tale of the first game but adopted a very different structure. Instead of being strictly level-based, the player was

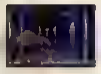
"THE SERIES HAS SPAWNED ALMOST 30 DIFFERENT ENTRIES ACROSS A MYRIAD OF PLATFORMS"

Rogue's Gallery

AKMODAN II
Super Castlevania IV
1991

BALORE
Aria Of Sorrow
2003

BEEZLEBUB
Symphony Of The Night 1997


BEHEMOTH
Dracula X: Rondo Of Blood 1993

DOGETHER
Dracula X: Rondo Of Blood 1993

MECHA KNIGHT
The New Generation
1994

FRANKENSTEIN'S MONSTER
Castlevania 1987

GALAMOTH
Kid Dracula
1991

CREAKING SKULL
Aria Of Sorrow
2003

GRANFALLOON
Symphony Of The Night 1997

KARASUMAN
Symphony Of The Night 1997

STONE GOLEM
Super Castlevania IV
1991

MANTICORE
Aria Of Sorrow
2003

MEDUSA
Super Castlevania IV
1991

MINOTAUR
Dracula X: Rondo Of Blood 1993

OLROX
Symphony Of The Night 1997

FLOATING SKULL
Super Castlevania IV
1991

ROWDAIN
Super Castlevania IV
1991

SIR GRAKUL
Super Castlevania IV
1991

SKULL KNIGHT
Dracula's Curse
1990

SLOGRA
Super Castlevania IV
1991

TALOS
Harmony Of Dissonance 2002

WEREWOLF
Dracula X: Rondo Of Blood 1993

WHITE DRAGONS
Castlevania 64
1999

WYVERN
Dracula X: Rondo Of Blood 1993

SEA SERPENT
Dracula X: Rondo Of Blood 1993

GAIBON
Super Castlevania IV
1991

THE GARDENER
Castlevania 64
1999

GOLEM
The New Generation
1994

HELLHOUND
The New Generation
1994

HELL GARGOYLE
The New Generation
1994

HIPPOGRYPH
Symphony Of The Night 1997

DRACULA
Castlevania
1987

DEATH
Castlevania
1987

ELIZABETH BARTLEY
The New Generation
1994

SHAFT
Symphony Of The Night 1997

GILLES DE RAIS
Castlevania 64
1999

CARMILLA
Simon's Quest
1988

SUCCUBUS
Symphony Of The Night 1997

COUNT BRAUNER
Portrait Of Ruin
2006

ADRAMELECH
Circle Of The Moon
2001

BONE GOLEM
Dracula X: Rondo Of Blood 1993

CERBERUS
Dracula X: Rondo Of Blood 1993

WARLOCK
Vampire's Kiss
1995

CYCLOPS
Dracula's Curse
1990

DANCING GHOSTS
Super Castlevania IV
1991

DOPPELGANGER
Dracula's Curse
1990

HEADLESS KNIGHT
Dracula X: Rondo Of Blood 1993

LIVING ARMOR
Harmony Of Dissonance 2002

MAGIC ARMOR
The New Generation
1994

NECROMANCER
Circle Of The Moon
2001

THE HYDRA
Super Castlevania IV
1991

BIG PEEPING EYE
Harmony Of Dissonance 2002

QUEEN OF MOSS
The New Generation
1994

DRAGON SKELETON
Castlevania Chronicles
2001

SKULL SORCERESS
Vampire's Kiss
1995

GLASS KNIGHT
Haunted Castle
1988

VAMPIRE BAT
Castlevania
1987

ANGEL MUMMY
Belmont's Revenge
1991

BIG GOLEM
Aria Of Sorrow
2003

» This artwork is taken from a little-known 3DO M2 arcade fighter called *Battle Tryst*.

expected to traverse Transylvania in search of Dracula's scattered body parts – a task that will help lift the curse that Dracula had placed on Simon immediately after their bloody encounter in the previous outing.

Again, like the original game *Simon's Quest* was released in Japan on the Famicom Disk System under the title *Dracula II: Noroi No Fuuin* (which translates as 'The Accursed Seal' in English), but a standard cartridge release followed in the West. *Simon's Quest* was part RPG, part-action platformer, with items to purchase, non-player characters to interact with and even an innovative real-time 'day and night' system, where enemies were stronger (not to mention more abundant) in darkness and weaker when in the sunlight. Although the game showcases some neat ideas, it hasn't aged particularly well and the unusual gameplay comes across as clunky and poorly realised when set against its more illustrious forebears. Nevertheless, it remains a significant title in the lineage and pre-dates the semi-RPG overtones that would be adopted for the more recent entries.

Sensing that its vampire-killing franchise had legs, Konami decided that it would produce an arcade edition that would benefit from the considerable technical prowess that coin-munching machines boasted at the time. Sadly, while the resultant *Haunted Castle* certainly looks better than the 8-bit games that sired it, the gameplay is pretty dismal, with annoying enemies and bland action. As a result it remains something of a curiosity, but the connection with *Castlevania* was enough to ensure that it was granted a Japan-only budget release in 2006 on the PlayStation 2.

After this minor hiccup Konami turned its attention to Nintendo's latest piece of hardware – the portable Game Boy. Released in 1989, *Castlevania: The Adventure* (known as *Legend Of Dracula* in its native homeland) was one of the first games for the fledgling portable and to be brutally frank, it shows. Graphically it's rather basic and the gameplay is slow and plodding. Ironically, of the key staff behind this lacklustre instalment was none other than Masato Maegawa, who would later break away from Konami to form Treasure, the legendary creator of such classic titles as *Gunstar Heroes*, *Radiant Silvergun* and *Ikaruga*.

The series returned to its NES roots with the next chapter of the Belmont saga. *Castlevania III: Dracula's Curse* (*Legend Of Demon Castle* in Japan) took the core gameplay of the original game and essentially augmented it with additional characters, branching level progression and some seriously impressive presentation. Easily the best *Castlevania* release for the 8-bit Nintendo, the game remains a firm favourite even today and is generally regarded as one of the finest entries in the entire canon.

The 16-bit Era Dawns

With the release of the 16-bit SNES in 1991, Konami decided to revisit the original game and 'reboot' it using the fearsome technological capabilities of Nintendo's new hardware. At the time it seemed foolish to not focus on creating a title that added to the rapidly expanding *Castlevania* storyline, but when the game finally appeared such petty criticisms were forgotten. Despite a rather slow opening level, *Super Castlevania IV* is arguably one of the finest SNES games in existence – quite a feat when you consider it was also one of the first to be published for the machine. Although Simon Belmont was once again the centre of attention of the tale, the level design was entirely different from that witnessed in the NES edition, with all-new enemies and stages that took advantage of the Super Nintendo's innovative features. Who could forget the smoothly scaling Golem boss and the rotating-cylinder room? As if all this graphical trickery wasn't enough, the game also boasted a hauntingly beautiful soundtrack that literally blew away anything heard in rival SNES games at the time.

Elsewhere, *Castlevania*'s handheld adventures continued apace with the sublime *Castlevania II: Belmont's Revenge*, produced for the

Game Boy in the same year as *Super Castlevania IV*. Here, Konami redeemed itself for the previous portable title with a game that surely ranks as one of the finest on the monochrome handheld. The music is of particular note, with the usually grating sound chip of the Game Boy being made to sing some seriously catchy and toe-tapping tunes.

Although the success of the *Castlevania* series was built on the NES, Konami was slowly but surely coming around to the idea of branching out to other platforms. With the first 16-bit *Castlevania* reaffirming Konami's talent, the company's next move was eagerly awaited. Thankfully it didn't disappoint. *Dracula X: Rondo Of Blood* was released for NEC's PC-Engine Super CD-ROM in 1993 and although it removed some of the embellishments that had been so well received in *Super Castlevania IV* (the lack of multi-directional whipping being the most notable), what it added was considerable, the branching level progression from *Dracula's Curse* made a welcome return, only this time it offered much more in the way of replay value. The CD-ROM storage medium was used to grant the game a gorgeous anime-style introduction and the soundtrack remains a distinguished masterpiece. Amazingly, due to a petty disagreement between NEC's US distribution arm TTI (Turbo Technologies, Inc) and Konami, the game was never released outside of Japan and only very recently made its Western debut as an unlockable bonus in the 2007 PSP remake *Castlevania: The Dracula X Chronicles*.

"VAMPIRE'S KISS IS NOW MUCH SOUGHT AFTER"

Having taken the franchise to NEC's hardware, Konami then turned its attention to Nintendo's main rival Sega. *Castlevania: The New Generation* (known as *Castlevania: Bloodlines* in North America and *Vampire Killer* in Japan) proved that Konami was a talent to be reckoned with, no matter what hardware the company coded on. Not wanting to open up a can of worms here, but even the most ardent Sega fan would admit that the SNES generally played host to the more polished games of the 16-bit era. However, *The New Generation* was something of a revelation, not only did it sport tremendously detailed visuals, but it also featured sprite scaling and other effects that were typically not seen on the Mega Drive – here was a title that could truly give *Super Castlevania IV* a run for its money.

As the 16-bit era drew to a close, a semi-sequel to *Dracula X: Rondo Of Blood* was published for the SNES in 1995, sadly it's something of a disappointment. *Castlevania: Vampire's Kiss* (*Castlevania: Dracula X* if you're American) ditched the branching levels and replaced them with strictly linear ones. Also, the stage design was changed almost beyond recognition, with several amendments coming across as particularly amateurish. Despite its relatively poor critical reception, *Vampire's Kiss* has gone on to be something of a collector's item, largely due to the low print run coming at the end of the SNES's life span.

The IGA Years

It's around this time that the enigmatic Koji 'IGA' Igarashi joins our tale. A long-time Konami employee, he would come to work on what is arguably the most important (not to mention popular) entry in the entire history of the *Castlevania* series – *Symphony Of The Night* – and would eventually become the producer of the entire series. Ironically for a game that has since passed into videogame legend, this 32-bit instalment was initially met with intense scepticism and even mild

derision. When the first screens were published, many critics balked at the primitive 2D visuals and accused Konami of being too conservative to bring the series up to date in an era that was becoming rapidly obsessed with all things three-dimensional. What these early screens didn't illustrate was the massive sea change that had occurred in terms of gameplay; no longer was the world of *Castlevania* restricted to linear or merely 'branching' levels. The structure of this new game echoed that of the oft-misunderstood *Simon's Quest*, with the player being free to explore each nook and cranny of Dracula's fortress at will, providing they possessed the necessary items and equipment.

Because *SOTN* borrowed many elements from Nintendo's SNES hit *Super Metroid*, the game has, over time, been branded 'Metroidvania'. However, *SOTN* also brought many other ideas to the table. The most striking was the fact that for once, a Belmont descendant was not the main character of the story. Dracula's half-vamp, half-human son took centre stage and proved to be one of the most popular and enduring leads the series has ever seen. The game also introduced many RPG-style concepts, such as experience points, weapons, armour, spells and restorative items. Despite some rather puzzling reviews (the *Official UK PlayStation Magazine* was particularly harsh on the 'outdated' visuals and gameplay), *SOTN* swiftly established itself as a true classic of the 32-bit generation, being granted platinum status in the US and earning itself a 'Best of' re-release in Japan. It's worth noting that the European release was nothing short of a disaster, with Konami struggling to shift the initial small shipment of PAL copies. As a result the game is now quite rare in this format and worth a fair few bob these days, especially if you have the limited edition artwork book and soundtrack CD. A Japan-only Saturn conversion was also produced but although it featured additional levels and another playable character, it was afflicted by crippling slowdown and lacked many of the clever visual flourishes of the PlayStation original.

It's paradoxical that after releasing what is generally regarded as being the finest game in the series, Konami then proceeded to produce several distinctly underwhelming titles. *Castlevania Legends* on the Game Boy was the first title to be developed post-*SOTN* and even went as far as to include new poster boy Alucard as an end-of-level opponent, but it was an insipid effort that contained none of the invention and brilliance of its 32-bit forebear. However, while this fairly incongruous release did little to dent the enthusiasm of the *Castlevania* fan base, the next game in the lineage would leave a lasting scar that for some fans has not healed even to this day.

3D Or Not 3D

Taking into consideration that many established videogame franchises were being dragged kicking and screaming into the realm of 3D during this period, it was obvious that the same would happen to *Castlevania* at some point. During the development of *SOTN*, a full-3D adventure was announced for Nintendo's upcoming N64 console with a few basic promotional movies showcasing the weirdly angular characters and the kind of action they'd be indulging in. However the development time was a protracted one and when the game eventually limped out onto store shelves in 1999 it was a pared down experience compared to what had been promised. Instead of offering four different characters, as was hinted in the trailer, it only contained two – Reinhardt Schneider (your typical Belmont-style whip-carrying hero) and Carrie Fernandez (a young girl with magical powers). However, a lack of playable protagonists was the least of *Castlevania 64*'s problems.

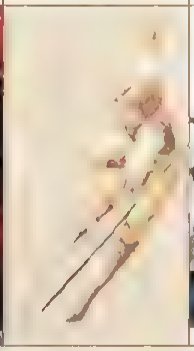
Vampire Killers

Simon Belmont

Arguably the most famous member of the Belmont lineage, Simon has appeared in more adventures than any other character (although technically five of his six entries are the same story retold). Kicking things off in 1691, he later defeated Dracula a second time in 1698.

John Morris

John Morris is connected to Bram Stoker's original *Dracula* novel – his father was Quincy Morris, who dies in the final epic confrontation with Vlad in Transylvania. Astonishingly, he's descended from the Belmonts and is therefore rather tasty with a whip.



Richter Belmont

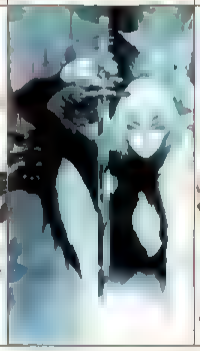
A close second to Simon in the popularity stakes, Richter has starred in *Rondo Of Blood* and *SOTN* – two games that are etched into the consciousness of every *Castlevania* fan. His blue tunic means you're unlikely to lose sight of him when he's in the thick of things.

Alucard

Although he made a playable appearance in *Castlevania III: Dracula's Curse*, Alucard became a big fan's favourite thanks to his leading role in the most popular game in the series, *Symphony Of The Night*. It was a brave move by Konami to have a vampire in the starring role, but it paid off beautifully.

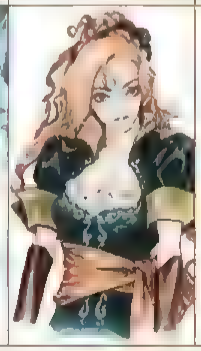
Soma Cruz

A high-school exchange student, Soma is transported to Dracula's Castle in the events of *Aria Of Sorrow*. He later learns that his fate is entwined with that of Dracula. Seeing as he comes from the year 2035, he sports rather more up-to-date attire than his fellow *Castlevania* heroes.



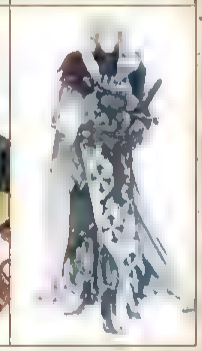
Maria Renard

Fans of the series thought Konami had gone soft when it added the cute Maria as an unlockable character in *Rondo Of Blood*, but her reappearance in *Symphony Of The Night* (she's playable in the Saturn version) has endeared her to purists. She's Richter's sister-in-law.

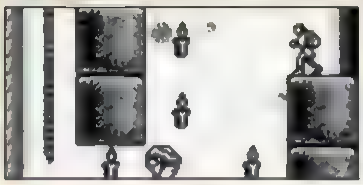


Leon Belmont

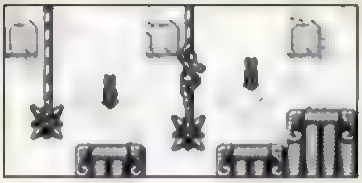
Technically the father of the vampire-hunting Belmonts, Leon was the first to take up the whip and face off against the forces of darkness. He also makes use of a magical gauntlet in order to save Sara, who was cruelly kidnapped by a nefarious fellow named Walter.



Handheld Horror

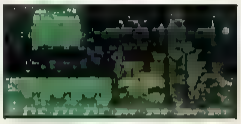


Castlevania: The Adventure (Game Boy)
One of the very first Game Boy games, *Castlevania: The Adventure* is a decidedly average release that is ultimately unsuccessful in transferring the excellent gameplay of the NES original to the small screen. It's slow, frustrating and graphically disappointing, and one for die-hard *Castlevania* completists only.

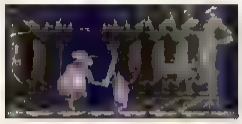


Castlevania II: Belmont's Revenge (Game Boy)
Compared to the previous GB title this is a complete turnaround. Not only are the graphics excellent and music some of the best you'll hear on Nintendo's handheld, the gameplay is fantastic and the sheer variety on offer is nothing short of staggering.

Castlevania Legends (Game Boy)
Sadly Konami was unable to match *Castlevania II: Belmont's Revenge* with this lacklustre sequel. The first game in the series to showcase a female Belmont, *Legends* feels like a throwback to *Castlevania: The Adventure* with uninspired level design and monotonous action. Alucard makes an appearance as an end-of-level boss.

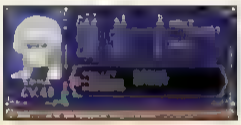


Castlevania: Circle Of The Moon (GBA)
Castlevania: Circle Of The Moon is a fairly successful attempt at bringing the gameplay of *Symphony Of The Night* to the small screen. The game is hugely enjoyable and offers plenty of challenge, however, the graphics are a bit dark so it's highly recommended you play this on a Game Boy Advance SP or DS.



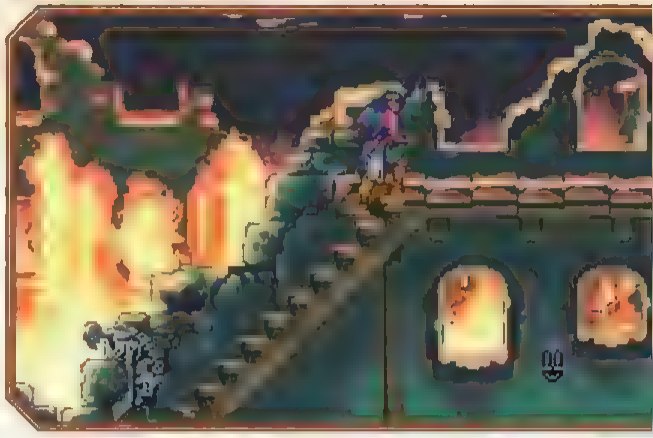
Castlevania: Harmony Of Dissonance (GBA)
More *Castlevania: Symphony Of The Night*-style action here, but this time Konami included improved graphics and far more detailed locations (at the expense of decent music, however – much of what is here could pass as Game Boy tunes). It's still not as deep as *Symphony Of The Night* but comes highly recommended regardless.

Castlevania: Aria Of Sorrow (GBA)
Third time lucky for the Game Boy Advance; *Castlevania: Aria Of Sorrow* is the first title on the machine to truly give its inspiration – *Symphony Of The Night* – a real run for its money. Boasting hundreds of different items, an innovative 'soul' collection system and one of the best plots in *Castlevania*'s long history, this is a real winner.



Castlevania: Dawn Of Sorrow (DS)
A direct sequel to the brilliant *Castlevania: Aria Of Sorrow*, this Nintendo DS title takes much of what made the Game Boy Advance game so good and merely improves on it. A throwaway touch-screen spell system can often be annoying, but ultimately this is an excellent entry in the series and comes very highly recommended.

Castlevania: Portrait Of Ruin (DS)
Following on from the events shown in the Mega Drive game *Castlevania: The New Generation*, *Castlevania: Portrait Of Ruin* once again adheres to the 'Metroidvania' blueprint, but the game introduces some new ideas of its own, as well – the ability to travel to different locations through paintings being the most notable

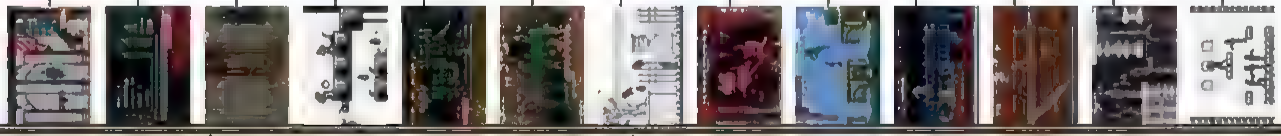


The transition from 2D to 3D hadn't exactly been a smooth one and it was clear that Konami had experienced some difficulty in keeping the traditional gameplay intact. The combat was dull, the auto-aiming unpredictable and the visuals weak. To make matters even worse several sections of the game degenerated into tiresome platforming assault courses where the 3D camera steadfastly refused to track the action correctly and one wrong move would send you plummeting back to the start.

It was clear that Konami simply hadn't had enough time to make the game as good as it possibly should have been, and this viewpoint was given credence when a semi-sequel quickly appeared in the same year under the title *Castlevania: Legacy Of Darkness*. Essentially the game that *Castlevania 64* should have been all along, it reinserted the missing characters that had been so cruelly removed during the development of the first game and generally polished things up. Sadly it still suffered from many of the same flaws that hampered its predecessor and was proof enough to some fans that *Castlevania* belonged in 2D; to force the vampire-hunting epic to adopt a 3D perspective was, in the eyes of many, pure sacrilege.

Thankfully, it seemed that Konami was thinking the same thing at least for a while. The next entry was *Castlevania: Circle Of The Moon* – the first of three 2D 'Metroidvania' titles for Nintendo's shiny new Game Boy Advance. Playing like a pared-down version of *SOTN*, this new game did much to restore faith in the series and was followed by two more GBA entries. *Castlevania: Harmony Of Dissonance* featured improved visuals but didn't really better *Circle Of The Moon* in the gameplay stakes, that fell to the third game – *Aria Of Sorrow* – which was hailed as a masterpiece comparable to *SOTN* itself. It also marked the first time that the franchise entered the future – 2035 to be exact.

Timeline



CASTLEVANIA (NES, 1987)

CASTLEVANIA II: SIMON'S QUEST (NES, 1988)

HAUNTED CASTLE (ARCADE, 1988)

CASTLEVANIA: THE ADVENTURE (GB, 1989)

CASTLEVANIA III: DRACULA'S CURSE (NES, 1990)

SUPER CASTLEVANIA IV (SNES, 1991)

CASTLEVANIA II: BELMONT'S REVENGE (GB, 1991)

AKUMAJO DRACULA (SHARP X68000, 1993)

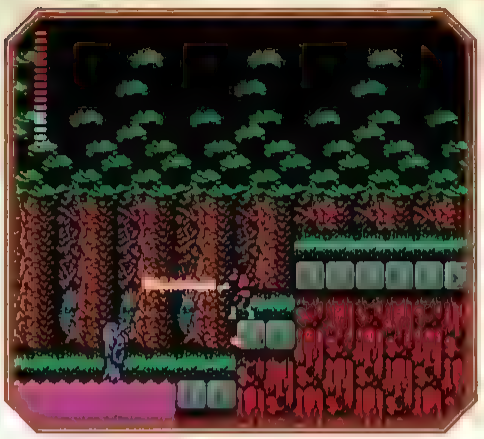
DRACULA X: RONDO OF BLOOD (PC-E, 1993)

CASTLEVANIA: THE NEW GENERATION (MEGA DRIVE, 1994)

CASTLEVANIA: VAMPIRE'S KISS (SNES, 1995)

CASTLEVANIA: SYMPHONY OF THE NIGHT (PLAYSTATION, 1997)

CASTLEVANIA LEGENDS (GB, 1998)



although thankfully Dracula's castle wasn't populated by laser gun wielding zombies in spacesuits.

After returning to glorious 2D form with the GBA releases, Konami again felt confident enough to dabble in 3D. *Castlevania: Lament Of Innocence* was released for the PS2 in 2003 and attempted to unify the gameplay of *SOTN* with the 3D combat of Capcom's stylish *Devil May Cry*. The result wasn't a total write-off by any means, and even the most hardened 3D cynic would have to admit that it was all quite enjoyable, but big mistakes were made in the construction of the game. The level design was featureless and repetitive, with many of the larger levels simply repeating textures and room designs. Mindful of the issues raised by fans over *Lament Of Innocence* producer Igarashi set about crafting the next 3D adventure in the series. *Castlevania: Curse Of Darkness* again used a 3D viewpoint but this time Igarashi attempted to accommodate more of the gameplay elements made famous by the 'Metroidvania' titles. Although some pretty decent concepts were featured, the game felt as empty as its predecessor and *Curse Of Darkness* was yet another ultimately unsuccessful attempt to take vampire slaying into the third dimension.

Thankfully, the disappointment of the home console versions was negated by the uniformly excellent Nintendo DS releases. *Dawn Of Sorrow* was a direct sequel to the GBA release *Aria Of Sorrow* and once again sees the player stepping into the shoes of exchange student Soma Cruz. *Portrait Of Ruin* swiftly followed in 2006 and attempted to tie itself in with the events of the Mega Drive title *Castlevania: The New Generation*, with the lead character Jonathan Morris being the son of the aforementioned John Morris. Eric Lecarde, the second playable character in *The New Generation*, also makes a cameo appearance. The portable fun didn't end there, though, in 2007 Konami finally answered the prayers of fans in the West by releasing a PSP remake of *Dracula X: Rondo Of Blood*. Featuring new 2.5D visuals and gorgeous artwork by *Castlevania* veteran Ayami Kojima, *Castlevania: The Dracula X Chronicles* also contained the original game and *SOTN* as unlockable extras.

And that brings us neatly to the present. The last release on the DS was *Castlevania: Order Of Ecclesia*. It's something of a deviation from the norm, adopting a female lead character, but 'Metroidvania' fans will be pleased to know it sticks to the tried and tested template laid down by *SOTN*. More disappointing was *Castlevania Judgment* – a 3D fighting game for the Wii that did try hard, but just wasn't up to the usual *Castlevania* pedigree. For the moment though are eyes are firmly focused on the incoming *Castlevania: Lords of Shadow*, which will be appearing for both the PlayStation 3 and Xbox 360. It's a truly stunning looking adventure that has been created by MercurySteam and is being overseen by Konami's very own Hideo Kojima. Boasting an all star cast that features Robert Carlyle and Patrick Stewart, Konami is promising an exciting new *Castlevania* game that takes the series well and truly back to its roots.

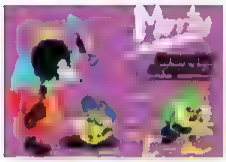
Whatever happens, the *Castlevania* series currently finds itself at an impasse. Although it continues to appear on the leading home console formats, fans will argue vehemently that the portable editions are the only *Castlevania* titles worth bothering with right now; by and large they stay true to the core principles of the series and keep the battle between good and evil rooted firmly in 2D. How long this can continue for is anyone's guess and it's likely that Igarashi and his team at Konami will put the disappointment of *Curse Of Darkness* behind them to explore the realm of 3D in the future, one can only hope that they finally get it right when they do.

Canned Castlevanias

Just like any other popular game series *Castlevania* has had a few false starts during its history, the most famous being the much hyped Dreamcast epic *Castlevania: Resurrection*. Announced when Sega's 128-bit super console was first launched, this 3D action title featured a zany time-travelling storyline and even went as far as to place a scantily clad Sonia Belmont – previously seen in the terrible Game Boy title *Castlevania Legends* – as one of the lead characters. However, there have been other canned titles – apparently a 2D adventure was in development for Sega's 32X that never saw the light of day, although it's rumoured that many of the sprites were carried over to *SOTN*. Speaking of *Symphony Of The Night*, a conversion was apparently underway for Tiger Electronics' oft-derided game.com handheld, but development was halted when the plug was pulled on the underperforming hardware.

WANTED: MONTY MOLE

DOWN IN THE MOLE HOLE



PUBLISHER: GREMLIN
RELEASED: 1984
GENRE: FLIP SCREEN PLATFORMER
FEATURED HARDWARE: ZX SPECTRUM
EXPECT TO PAY: £1+

HISTORY

Back in 1984, amid the gloomy backdrop of the UK miners' strike, the first *Monty Mole* game made the TV news thanks to its backstory about a desperate 'scab' mole and its caricature of union boss Arthur Scargill. Although the press exposure certainly shot *Monty Mole* (and developer Gremlin) to fame, the game didn't need to rely on timely gimmicks, as it was a great little platformer in its own right.

At first glance it didn't appear to offer anything new. You progressed through a series of underground caverns, dodging nasties and grabbing collectables. It was very quirky, very British and very *Manic Miner*. But the further you descended down the more surprises you'd find. There were crushers that would squash Monty flat and platforms that snap open and shut. Further down in the depths were mine carts on which Monty could hitch a ride. The game also introduced puzzle elements where you had to collect certain objects in a certain order to move onto the next screen. It all worked brilliantly well and was the perfect substitute for *Manic Miner* fans who weren't taken with the open sprawl of *Jet Set Willy*.

If you were a Commodore owner then the image on the right may look unfamiliar. That's because the Speccy version was written by Peter Harrap while Tony Crowther was responsible for the C64 version. Despite being developed in tandem the two programmers turned in quite different games with Crowther opting for scrolling graphics instead of Harrap's flip screen approach. However it's the superior Spectrum version that laid the foundations for the series as Harrap followed it up with the classic double bill of *Monty On The Run* and *Auf Wiedersehen Monty*.

The *Monty Mole* series deserves much more coverage than can be afforded in this short text but Harrap has seemingly gone to ground and we've been unable to contact him despite repeated attempts. If you just happen to be reading this Peter please get in touch with **RG**. We'd love to unearth the full story behind our favourite monocle-wearing mole.

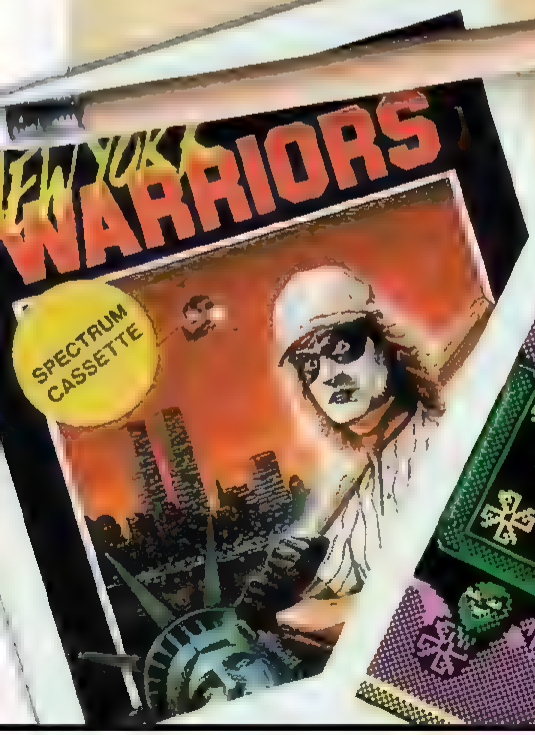
CRUSH
CRUSH

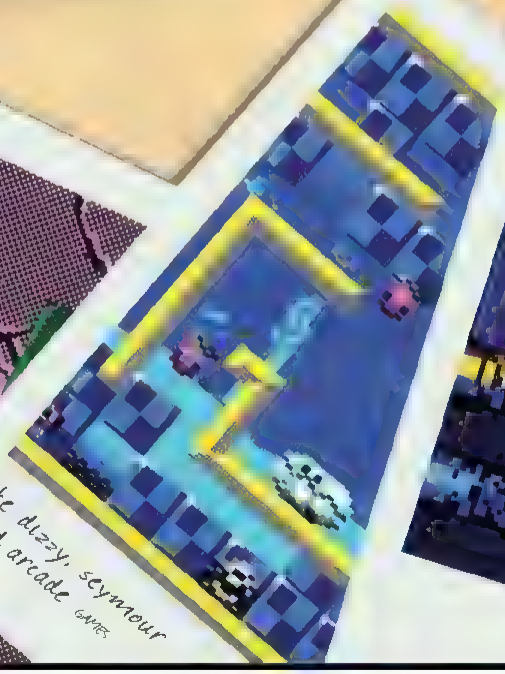
COMPANY PROFILE

Believe it or not, but this is what the inside of David Darling's office. looks like.

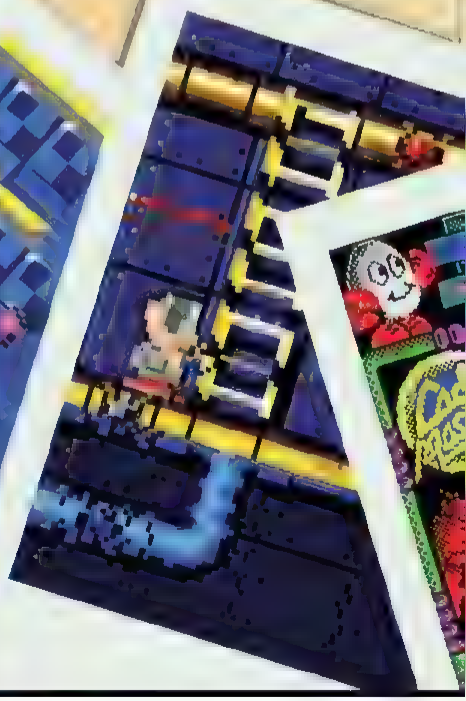
C) the elephant was another cute hero

Discover the genesis of popular 8-bit hero seymour





like dizzy, seymour liked arcade games



Painting the town Big Red

It started small but hit some dizzying heights – Big Red was responsible for some of the most well-known games in 8-bit history. David Crookes looks back at the rise and fall of a developer whose talent continues to entertain us today...

» [CPC] He may not have been as cool as Dizzy, but Seymour was still a popular character

Paul Ranson is sitting in his living room, children charging around him. 'Shall we leave you to it,' we ask him. "No, I'm fine to talk," he answers and launches into a potted history of his former company, Big Red Software, remembering the minutest of details and a host of names. "Is anyone actually interested in Big Red?" he inquires, laughing. "I was around 19 or 20 when I set it up. I'm 40 now."

Grown up he may be, but his love of games remains. Having decided against joining the Royal Air Force, he left sixth form and began his career as a programmer for Binary Design. After three to four years, the firm was employing 40 staff, all managed by Paul. "I had to make a decision," he says. "And at that time, setting up your own company and doing your own thing was the trend – so that's what I did, setting up an office in a warehouse in Macclesfield and forming my own company, Big Red. I simply don't know how the name came about."

The firm started writing titles such as the *Fun School* series for Europress and began knocking out the likes of *Double Dragon* for the Spectrum and European Superleague for the Amiga. It wasn't long before Big Red was on its way to success.

At that time, there were only a handful of people at the firm. Paul was manager and Spectrum/Amstrad CPC programmer. His brother, Pete, was the resident artist; Gary Hughes programmed the PC and Amiga; and al Commodore 64 work was outsourced to freelancer Andy Torkington. Freelance musicians sorted out the music.

"That was pretty much standard in those days," says programmer Fred Williams, who joined shortly after Binary Design closed down in 1990, and brought Spectrum and Amstrad experience with him. Not only that, but he also took along half-completed Binary project *New York Warriors*. "That got me the job," says Fred

As well as games, the company also put together a few non-games· basically interactive puzzles for a Eurotunne. exhibition centre and a tutorial for a steel-refining plant. As the money rolled in from such projects, Big Red was able to move to plusher premises.

Th ngs were looking good. "We were pretty much in cahoots with Codemasters by then," says Fred, pointing toward the close relationship Paul had fostered with Codies founders Richard and David Darling. Big Red had been touting its *Wacky Darts* game to every budget Spectrum publ sher it could think of, having been inspired by Binary Design's darts game *180*. That game had sold via Mastertronic and managed to shift 300,000 copies. Paul showed the Darlings the sales figures as an indication of how well it could do and Codemasters snapped up the game. From that moment on, the two companies were inseparable.

"The Darlings liked what they saw," says Paul. "They were impressed by our output and our games and they asked me to run Codemasters Business Limted. It meant I had to commute between Big Red in Macclesfield and Leamington for my work with Codemasters. It also meant the Darlings could concentrate on their top secret projects, the Game Genie for the consoles and things like that."

It was a relationship that was as integra to Codemasters as The Oliver Twins, the legendary creators of the *Dizzy* series. But because the Olivers were busy creating a *Dizzy* game for the NES, Big Red was asked to produce *Dizzy IV*, aka *Magicland Dizzy*. It was the biggest game in the series to date and was well received by the gaming press.

The fourth game in the franchise was so successful that programmer Jon Cartwright was asked to write *Dizzy Prince Of The Yolkfolk*. He had only joined the company in 1991 on a summer job, so to get that particular gig was impressive so impressive that, following the comp etion of his computer science degree, the Spectrum and CPC specialist got a full-time job with B g Red.

Dizzy Prince Of The Yolkfolk only really existed because Codies needed a title for a *Dizzy V* game pack to sell that Christmas but it did well, prompting Big Red Software to knock up a further *Dizzy* title in which the egg-shaped character was going to flit between movie plots in a Hollywood setting. It was to be called *Movieland Dizzy*.

It caused a massive argument between

IN BRIEF

Paul Ranson left Binary Design to set up his own company. He called it Big Red – a name that really was thought up in a pub and scribbled on a beer mat. Having become friendly with Codemasters, the developer worked on games such as *Dizzy*, *Micro Machines* and *Seymour* but a falling out with Codemasters, a takeover by Domark and a sale to Eidos marked the end of the firm. It was subsequently ignored by Eidos which meant the company fizzled out in a manner not in sync with its triumphant beginnings

» And you thought Seymour was a mass of pixels. Nope, he was real. And he worked at Big Red! Paul Ranson shakes his hand.

BLITZ GAMES

The O iver Twins – brothers Philip and Andrew – employed many of the old Big Red staff. As Phil p says, "In the early days of Codemasters, we all worked together and all socialised together. We respected the work they did and we all shared lots of ideas. Andrew and I only had the usual 24 hours in a day and more opportunities than we could handle, so we sub-contracted the development of several *Dizzy* games to Big Red. They did a great job and then wanted to do their own thing which was completely understandable.

"Over the years we went our separate ways and Big Red was purchased by Eidos, but were still located in Leamington Spa. When Eidos decided it no longer wanted this remote studio in August 1999 we moved in and offered them jobs. Most of them are still at Blitz and still enjoying making great games."

COMPANY PROFILE

BIG RED SOFTWARE

» *Super Seymour* was a huge hit on the Commodore 64, achieving a staggering 94 per cent in *Zzap!64*.

Codemasters, the Olivers (who created *Dizzy*) and Big Red. The Codies felt that *Dizzy* should remain in fantasy settings and should not be pitted in a realistic game. Big Red felt it would take the series in a fresh direction. Codemasters won

BIG RED WAS KEEN TO DIFFERENTIATE SEYMOUR FROM DIZZY WHO WAS AN EGG AND MOVED AROUND BY PERFORMING SOMERSAULTS

SEGA CARTRIDGES

Codemasters manufactured its own Sega cartridges and had a small factory on an industrial estate in Leamington. Big Red wrote the QA software which allowed the Codies to see if the carts had burnt correctly. For the Game Gear, Big Red snuck in a little *Pong* game that you could play link-up with any Codies Game Gear carts: you just held down Start at boot up.

the row and *Dizzy* was removed from the game. A new, chumpier character replaced him and Seymour was born.

"Codemasters and the Olivers preferred to keep Dizzy in his home fantasy environment," explains Fred. "But we argued that the movieland design didn't actually feature any real-world film studio stuff and was entirely set in the movies themselves. But there was no way we could persuade them so we tweaked the game so that we ended up with real-world studio stuff with a new character although we kept the *Dizzy* graphic adventure title engine. We thought if you've got a game mechanic that works, just keep using it."

The result was *Seymour Goes to Hollywood* and it was followed up with *Wild West Seymour*, a game that had actually been pitched at the same time as *Movieland Dizzy*.

"*Wild West Seymour* wasn't a graphic adventure at all to begin with," Fred reveals. "It was intended to be something like *Feud*, with two characters running around a maze collecting bits of, well, something, to throw at each other. The title, though not the design, later got re-used for *Seymour's* stab at the 'episodic gaming' genre."

Big Red was proud of Seymour. It was keen to differentiate the character from Dizzy who was an egg and moved around by performing somersaults and leaping around platforms. *Seymour* had more puzzles, with the platforms taking second place. "We also made sure the plots were very different," says Fred. "The Dizzies tend to be 'Dizzy's got everyone into trouble, and has to get them all out of the mess he put them in', and set in fairytale worlds. *Seymour's* plots were about everyone being let down by someone else. Seymour had to step in and make everything right by cheering people up.'"

Shortly after, Big Red was called upon to produce *Dizzy III.V*, a demo version of *Dizzy IV* earmarked for a *Crash* cassette. Codemasters had wanted the *Dizzy* game to consist of the first few rooms, but since *Magicland Dizzy's* beginning is simply 'walk left and jump the shark', it wasn't much fun.

Fred scribbled a four-room introduction design, Pete created new graphics (and with such a small adventure, he could include big animated objects like a teleportation machine), and two days later the covertape demo was complete. Unfortunately, *Crash* then decided to describe the newly introduced youngster egg as Dizzy's son. "It got us into no end of trouble with the Olivers," said Fred. "He's just a generic young egg, okay?" A similar demo was created for *Seymour* called *Take 1*. This time the design was completed over a weekend with a further two days implementing the film recording and playback work. It was used on *Your Sinclair* and *Amstrad Action* covertapes.

When *Wild West Seymour* was released in 1992, things changed even more. Big Red decided that people didn't like the way the games were getting bigger and increasingly complicated, particularly because games in those days didn't have a Quick Save feature and they had to be played through in one sitting.

» (Spectrum) *Magicland Dizzy* featured many nods to both fairy tales and mythology and is a classic adventure.

So it went for episodes.

Fred said: "The little covertape game, *Seymour Take 1*, had proved popular so we thought why not release a series of something sort of in between sized? It was an idea before its time and ended up being implemented oddly, with all of the episodes bundled into a single title."

In the same year, travelling was proving quite difficult for Paul and so he decided to move Big Red again. It took residence on an industrial estate outside Leamington Spa, a stone's throw from Codemasters HQ.

By day, Big Red produced 8-bit games while at night it found Game Genie codes. It meant the team burnt the midnight oil disassembling Z80 code and using logic analysers to work out when lives were lost. Jon laughs: "We had a writer called Keith Stuart who was writing the inane '30 wonders' for the Game Genie code manual. He wrote some stuff that cracked me up: 'Doctor Mario: He's the master surgeon of mirth, he's the gynaecologist of giggles, he's Doctor Mario'. Probably not the marketing line Nintendo would have used." Keith Stuart currently writes for *The Guardian*.

With the move to Leamington, it was time for another recruitment drive. Lyndon Homewood and Chris Swan were taken on (both now working for Blitz Games. One of Lyndon's major projects was on the PC port of *Micro Machines* which Fred and Jon also contributed to.

Fred also produced *Micro Machines* for the Game Boy. It was risky since Codemasters were still in Nintendo's bad books and the company was debating whether it would be producing any Game Boy titles at all. Big Red went ahead regardless, using the Codie's in-house manufactured Orac development kits that had been created alongside the Game Boy Game Genie's Software. It was eventually released by Ocean.

In 1993, another move was on the

cards. Big Red moved to Southam, sharing offices with a microscope distributor, while switching from last gen development for Codemasters to PC development with Domark. But the company still created outsource-style artwork for *Micro Machines 2* on Genesis.

Other new blood was brought in, including Mark Neesam, Paul Jennings, Brian Hartley, Rich Jones, Mike Procter, Tom Adams (all of whom were artists of various flavours since games were starting to become significantly more art heavy). The firm also employed its own musical talent rather than relying on freelancers. Enter Gez Gourley and a huge collection of keyboards and other mysterious devices with knobs on.

Yet relations between Big Red and Codemasters had become strained, leading to a parting of the ways in 1993. Despite that, Codies founder David Darling, who recently sold his remaining shares in the firm, has fond memories of Big Red. "They did a lot of games for us," he said. "They were very productive, hard working and a fun bunch of guys to work with. For Paul to became our development manager and still manage Big Red must have been quite hard work. They had some impressive staff: Fred, one of their programmes, is very, very good and the developer's strength was that they concentrated on gameplay and were original and innovative."

Big Red Software continued without Codemasters and began working on three-dimensional games, among them *Tank Commander*. It was the most expensive title Big Red had ever produced, costing £80,000 and it was earmarked for a Domark release. Paul had been approached by Domark and later had been invited out to the E3 show that year, spending time on the flight sitting next to Philip Oliver.

It was to be a disaster personally for Paul – his baggage had gone missing so the only clothes he had were the ones he was wearing – but professionally, it worked out well. He was introduced to the men behind Eidos and a series of lengthy meetings followed. They let him in on the secret that Eidos was going to float the business on the stock exchange and they said they were impressed by Big Red's work. *Tank Commander* was well received on its release, in particular for its use of local area networks.

At the time Big Red was also working with some of the very early 3D graphics cards from Yamaha and a variety of the VR headsets. Jon recalls: "I had a visit from the Yamaha guys and Paul was out of the country so it was down to me to entertain them. They were quite keen to go sample some local beer so I took them to a pub in Leamington and then asked where they'd like to go to eat. I took them for a curry."

WE BECAME MORE MARGINAL AND AS EIDOS BOUGHT MORE COMPANIES IT BECAME CLEAR WE WERE NOT GOING ANYWHERE

Soon, Big Red was working on *Big Red Racing*, producing it from the firm's new office in Southam. It was another massive title for the firm and was released in 1995. Fred says: "I'd written the map-renderer and editor for *Tank Commander*, and wrote a split-screen jeep-racing game demo using the same engine. Mark Neesam put a level together, and it grew from there. It's the last game that I can claim to have both designed and coded. There's a fair amount of programmer art in there too. Games are getting too big for that wide a job role these days, though downloadable games look like reviving the idea."

Artist Brian Hartley says *Big Red Racing* was his first real 3D game. "Creating 3D models of the vehicles was something that has stayed in my memory. I used graph paper to draw out the initial design, then typed the relevant co-ordinates into a text file. It seems almost surreal when you consider the advances in technology over the last ten years or so."

Domark, which had loved *Tank Commander* so much it bought Big Red for £300,000 of shares and £100,000 in cash, released *Big Red Racing*. But in 1995, Domark was taken over by Eidos which wanted Big Red to produce *Tank Commander 2*. "That game was canned," says Paul. "It's a real shame because as time went on Eidos kept forgetting we existed. We became more marginal and, as they bought more companies, it became clear that we were not really going anywhere. So I left."

Brian recalls starting work on the ant-based *Swarm Troopers* following the Eidos takeover. "We moved to offices in what used to be a large Victorian country house but is now, sadly, a business park on the outskirts of Stratford-upon-Avon," he says. "Although it was an amazing place to work, the projects that we worked on never really took off. The company expanded slightly, and work started on what ended up being *Assault Corps*.

"It was about this time Paul Ranson left, and Jon Cartwright took over as studio head. We then moved to premises on The Parade in Leamington Spa, where work continued on *Assault Corps*. Sadly things didn't work out... I eventually left and joined Silicon Dreams in 1998."

Jon adds: "The problem was Eidos bought US Gold and thus Core and also snapped up Domark, Big Red and Simis. Unlike the Codemasters years though, when we could produce more or less anything and they'd cheerfully release it on the grounds that the vast majority of it would float, Eidos weren't interested in anything we put together.

Out of that spending spree, they'd got *Tomb Raider*, of course, which took quite a bit of living up to. We were in the slightly bizarre situation of being paid by Eidos, but pitching our games to Mindscape and Acclaim, and having them pull out, often quite late into development. After rather too much of this, Eidos pulled the plug."

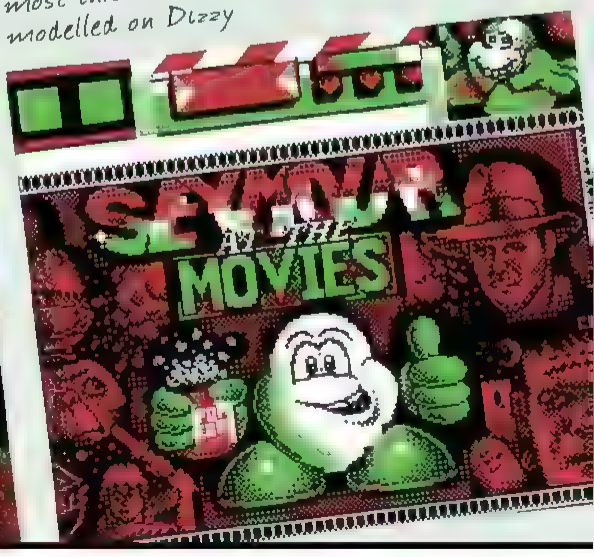
Big Red Software changed its name to Corrosive Software and Jon attempted a management buy-out to allow the team to finish the PC/PSone game *Hard Corps* with Acclaim. It didn't come off and the Big Red story ended, many of its staff managed to get jobs with Blitz Games, which was run by the Oliver Twins. Still, one thing is for sure, the Big Red Software name will not be forgotten...

» [Spectrum] *CJ in the USA*. Be sure to watch out for dangerous dogs and rampant American footballers.

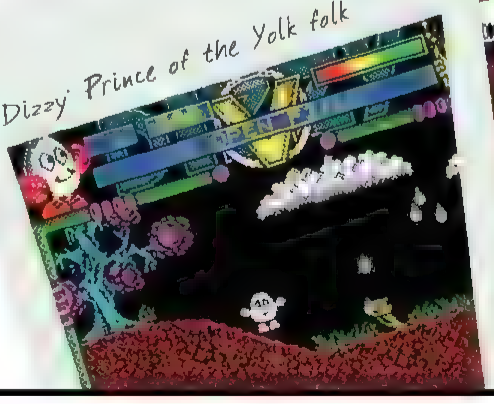
» An advert for the Game Gear's *Game Genie*. Who said cheaters never prosper?

» The Game Genie in all its glory. Nintendo weren't fans of the NES and SNES versions.

Seymour was Big Red's most infamous character, modelled on Dizzy



Dizzy: Prince of the Yolk folk



COMPANY PROFILE

BIG RED SOFTWARE

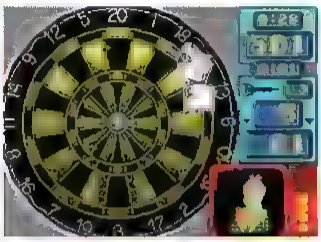
THE GAMES OF BIG RED

NEW YORK WARRIORS

» With the year 2014 and New York about to explode – a bomb at the top of the World Trade Center! – you take on the role of a lone solider shooting his way across the city in a game that was snatched from the dead remains of Binary Design. Difficult and slow, it isn't a fine moment.

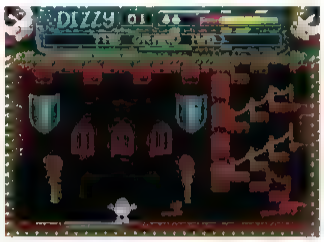
WACKY DARTS

» This game brought Big Red to the attention of Codemasters, hoping to suck on the success of Mastertronic's *180*. With seven characters to play against and alternatives to darts, including bullets and arrows, this game is fun albeit frustrating since the collision detection is woefully poor and can lead to some hair-pulling results.



MAGICLAND DIZZY

» Taking over from the Oliver Twins, Big Red produced its first *Dizzy* game. Evil wizard Zaks has to be defeated in this 'eggs-cellent' game – if he doesn't his Yolkfolk pals will be forever trapped until the nasty one's spell. The addition of an energy bar and the need to collect 30 diamonds adds to the fun. It was included in the *Dizzy Collection*.

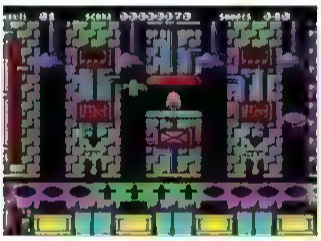


GRELL AND FALLA

» How does your garden grow? In this game, it's time to find out as you try to keep the insects away from your lovely patch of land. Get Grell, a gnome who can kill those insects and Falla, a fun fairy who uses magic dust to nurture the perfect garden. Fast, fun, cartoony it was Big Red/Codemasters at their most typical.

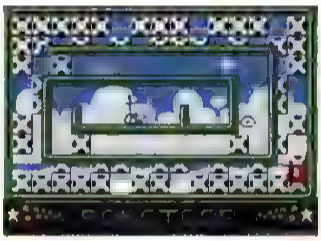
PANIC DIZZY

» Dizzy stars in a puzzle game (one of many spin-offs for the character) in which you must align falling shapes into the correct holes. Criticised by many for merely including Dizzy to make the game fly off the shelves, it is nevertheless worth a try. Again it was also included in *Dizzy's Excellent Adventures*.



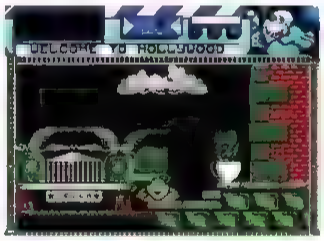
SERGEANT SEYMOUR: ROBOTCOP

» A familiar-sounding name marks this *Seymour* game and, as you can guess, our lovable character is not only a cop but a robotic one at that. With an extending arm too. The aim of this difficult game is to kill the bad guys within a time limit in order to progress.



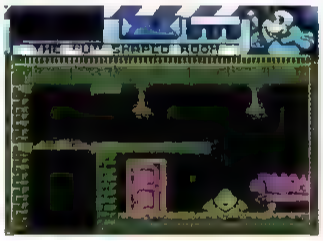
SEYMOUR GOES TO HOLLYWOOD

» This is the game which began the *Seymour* series, and what a debut it is. Taking more than a lead from *Dizzy*, the game is hot on puzzles but with real-life references from *Grease*, *The Wizard Of Oz* and, er *Flash Boredom*. It's a big game, and hard too, but worth persevering with.



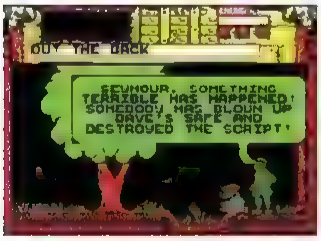
SEYMOUR TAKE ONE

» This cut-down version of *Seymour Goes to Hollywood* found itself nailed to the *Amstrad Action* and *Your Sinclair* cover cassettes and it's a great game in its own right, having none of the problems of the parent game – that being the sprawling lots around which Seymour treads. It got many people interested in the character.



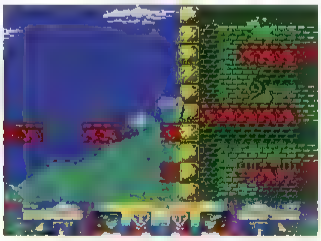
WILD WEST SEYMOUR

» Originally a *Feud*-style game, this was turned into a graphic adventure and pitched as a follow-up to *Seymour Goes to Hollywood*. Set over three acts, it was an easier game than its predecessor and also centred around Seymour being in the movies – the aim being to get back missing equipment.



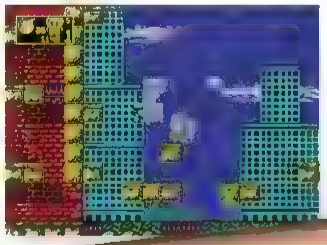
CJ'S ELEPHANT ANTICS

» On his way to an English zoo, CJ uses an umbrella as a parachute, jumps from a plane and ends up in France. The aim? To get to Africa over a series of jerkily scrolling platforms while avoiding predictable baddies and nasty spikes. It's colourful, challenging and has a great two-player option. Also included on *Quattro Mega Stars*.



CJ IN THE USA

» Having got back to Africa, CJ was faced with yet another problem. His brothers and sisters had been kidnapped and dispersed across America. So you have to help him find them. It's another platform title with imagination. From shooting peanuts to tackling American footballers, you'll soon eat up your nine lives.

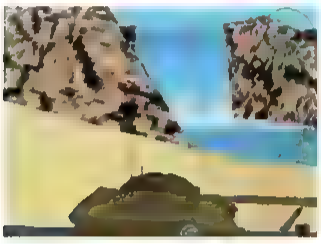


MICRO MACHINES

» This is one of Codemasters' all-time classic games. Fred Williams created the Game Boy version and it retains the variation and wackiness of the franchise. The top-down view and miniature cars enthralled a generation. And with 21 tracks and up to four opponents to race against, you were seldom bored.

TANK COMMANDER

» Think of a brilliant multiplay tank sim and you get *Tank Commander*, a game released by Domark. Play one of seven missions in a variety of settings, blasting your way through the scenery at speed with an impressive range of weapons. The graphics look dated now but it's still a major challenge.



BIG RED RACING

» These guys must have been on something when they made this racing game. After all, pitting snowploughs against snow mobiles and throwing a whole host of other ill-matched affairs your way is hardly sane. Yet it worked and while the game doesn't often get spoken about today it still has a lot going for it.

STEG THE SLUG

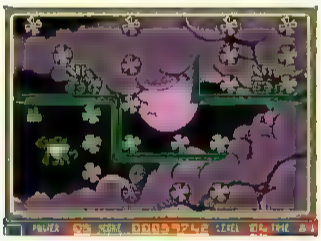
» It may be sluggish at times but the premise is still a lot of fun and worth sticking with. Ten levels, all very samey, revolving around blowing bubbles to catch crawling grubs in order for them to flout up and feed Steg's little slugs. It's a challenge, that's for sure – mainly because the difficulty level is pitched far too high towards the end.

SPELLBOUND DIZZY

» With a whopping 105 screens, the fifth Dizzy adventure is a big, bad beast. Stonking graphics combine with rich gameplay and variety, and while at times it feels just a tad too large, it is packed with enough features to make it stands head and shoulders above the previous games in the series. It was included in *Dizzy's Excellent Adventures*.

SUPER SEYMOUR SAVES THE PLANET

» As possibly the worst *Seymour* game, Planet looks and feels old. It's not a game you'll return to and neither is the premise is not that original, but clear up some toxic waste while collecting tokens around each single-screen level. There is little to recommend as the game boasts average graphics and sound.



DROPZONE

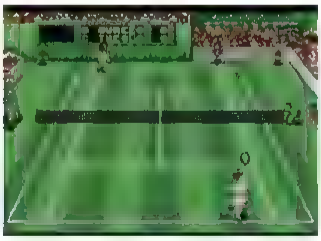
» Big Red produced the Game Gear port of this classic Archer Maclean game back in 1994. It's a decent conversion, taking the *Defender* influences and using them well as you grab a jetpack and attempt to rescue and return a group of scientists from their alien attackers. It was good to see it on the Sega handheld.

SINK OR SWIM

» Big Red Software loved the Game Gear which is why it was only too happy to port many games to it, including *Sink Or Swim*. It was originally released in 1993 for the PC but converted well to the Game Gear with little magic lost. Kevin's attempts to save passengers are hindered by the fact they are so thick.

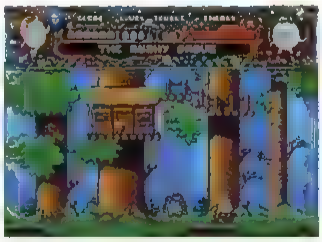
PETE SAMPRAS TENNIS

» Another Big Red port, also for Game Gear, *Pete Sampras Tennis* lets you play in either a challenge match, tournament or world tour. You can also play Crazy Tennis – watch out for a cameo Dizzy appearance. Fiddly controls ruin the title, which is a shame because it's a fine game that demands a go.



PRINCE OF THE YOLK FOLK

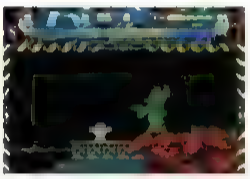
» With an evil troll having taken over the castle, Dizzy is called upon to save the kingdom in an adventure packed with puzzles. You have to use your brain but there are only 30 screens to get around. Short though it is, it's one of the best *Dizzy* games to date. It was included in *Dizzy's Excellent Adventures*.



WORKING FOR BIG RED

Programmer Jon Cartwright says the days working at Big Red were among the best of his life and he saw the firm grow from a small operation into a large-ish concern. "Our second to last office was an old manor house on 16 acres next to the river Avon in Stratford," he says. "Perhaps we had delusions of grandeur because it turned out to be pretty impractical in the end. Still, the rooftop barbecues that we had a few times were fun."

He says his university was distinctly unimpressed when he said he was going into videogames and recruitment in the early stages was revolved around employing friends or friends of friends. "To begin with, programming games at Big Red used to be one programmer and half an artist – Pete – to a game and they took around six weeks. We literally threw a floppy disc to each other with content on. It was funny to see in just a few short years how many people and how long it took to make a game."



Magicland was Big Red Software's very first Dizzy gig and led to many sequels

MR HELI

WHY YOU MUST PLAY

IREM'S MR HELI COMBINED CUTE VISUALS WITH FIENDISHLY HARD GAMEPLAY. GABRIEL McGRATH LOOKS BACK AT THE CULT BLASTER AND SETS HIS CASE AS TO WHY EVERY GAMER SHOULD EXPERIENCE THE QUIRKY BLASTER

TIMELINE

FORT APOCALYPSE
Version Featured: Commodore 64
Year Released: 1982

GALAXY FORCE 2
Version Featured: Arcade
Year Released: 1988

IN THE HUNT
Version Featured: Arcade
Year Released: 1995

VANGUARD
Version Featured: Arcade
Year Released: 1981

CYBERNOID
Version Featured: Spectrum
Year Released: 1987

BLOOD MONEY
Version Featured: Amiga
Year Released: 1989

PROJECT X ZONE 2
Version Featured: Arcade
Year Released: 1999

1. AMIGA
The Amiga version offers jerky gameplay, a cramped play area, and inaccurate level designs. The music has been poorly remixed. Strangely, weapon shops no longer indicate an item's availability. And your extra-large health bar will be quickly worn down by respawning enemies. *Amiga Format* gave it 52%

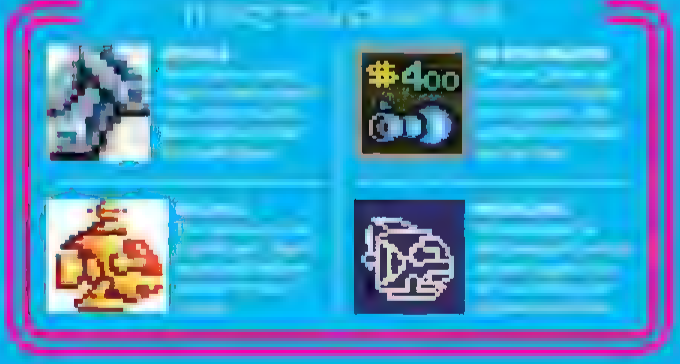
2. AMSTRAD CPC
More playable than the 16-bits, but frustrating. Destructible blocks only explode in groups of four. There's a big delay when you collect crystals or buy weapons. Enemies keep respawning. And shops still don't show whether they're available or not. Yet it improves on C64's audio, with simultaneous music and SFX.

3. ATARI ST
Remarkably similar to the jerky gameplay and cramped play area of the Amiga version. Like all conversions here (except PC-Engine) the Gold and Spy helis are present but don't actually perform their expected functions. The *Games Machine* awarded this 65%, showing either generosity or a failure in basic maths.

4. COMMODORE 64
The C64 version shares the same problems as the other 8-bits (respawning enemies, no shop availability indication) but fixes the delay in grabbing weapons. It's smooth and playable, with a bonus *Armalyte*-esque title screen. Choose between music or very good sound effects.

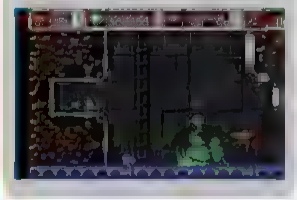
5. PC-ENGINE
Wow. This conversion is so far ahead of the rest, it's about to lap them. Graphics vary from arcade perfect to 'better than the arcade' (Level 2's parallax rockwalls are particularly superb). The original's catchy music sounds brilliant in stereo. But be warned: Level 2's boss is a total %$*@!

6. ZX SPECTRUM
Take out the Amstrad's colours (it's monochrome) and music (sound effects only) and you have the Spectrum version. Some enemies require more missiles to kill, but each life now begins with a generous five-second shield. All the Amstrad port's sins are replicated – maddening delays, constant evil respawning.



TRY THIS NEXT

CYBERNOID
Ready for another difficult journey through colourful caverns? *Cybernoid* is the game for you. *Mr Heli*'s smooth scrolling is replaced by *Cybernoid*'s 'flickscreen' scrolling. The latter offers more weapons (chosen using keyboard number keys) and sections requiring pixel-perfect timing. One of *Cybernoid*'s other gameplay features is the use of *Rick Dangerous*-style traps. Sure these traps aren't invisible, but they still offer opportunities for sudden death, so trap locations must be memorised. Whether this is seen as a 'challenge' or 'frustration' is up to you. Hewson's classic is easy to find, appearing on all major 8-bit and 16-bit home computers, plus NES.



LINES
20
Nintendo GAME BOY™
SELECT
START
B
A

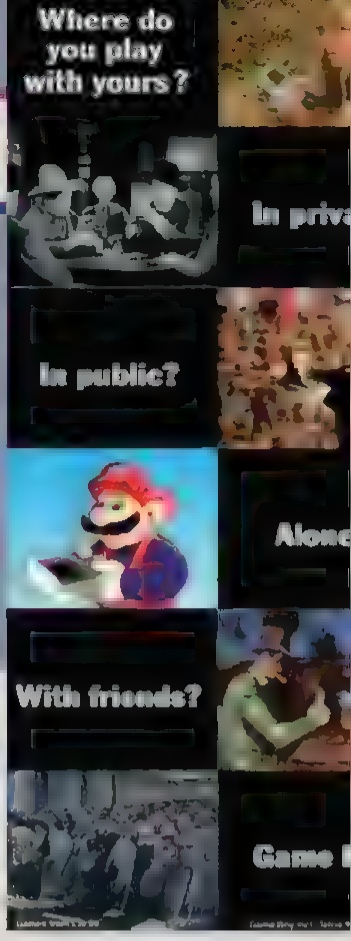
GAME BOY

The origins of this seminal console can be traced back to one of Nintendo's early portable successes – the Game & Watch range. Created by assembly line engineer turned design guru Gunpei Yokoi and his highly talented team at Nintendo Research and Development 1, the pioneering line of LCD handheld games showcased basic technology but utilised it in innovative ways, ensuring mass appeal and gaining its manufacturer mountains of cash in the process. Yokoi concocted the idea of 'Lateral Thinking of Withered Technology', a design philosophy which focused on using inexpensive and familiar components in new and interesting ways. This model would carry through to Yokoi's next project, which would make the success enjoyed by the Game & Watch series look almost inconsequential by comparison.

By the time the Eighties were drawing to a close, Nintendo's standing in the videogame industry was impressive, the NES had single-handedly saved the world console market from extinction following the catalysmic crash of '83 and the aforementioned Game & Watch range was still shifting a highly respectable number of units. However, Yokoi knew that the technology behind these LCD games was starting to look outdated when placed alongside the experiences offered by the NES and other 8-bit home computers, so he began his quest to create a successor. As was the case with the Game & Watch, this new machine wouldn't use revolutionary features to get itself noticed. Yokoi's design beliefs were too strong, he knew that if he tried to create a console that was at the cutting edge of technology it would be expensive and therefore lack mass market appeal. Instead he looked at building a device that was economical to manufacture and perfectly suited for its purpose – mobility.

This new console was shown in prototype form in 1987 and would later be demoed at various trade shows. The effect it had on the development community was electrifying. "It was really pretty amazing and exactly what we needed," says Rare's Paul Machacek, who coded the fantastic Game Boy title *Donkey Kong Land* and still works within the firm as a Program Manager. "We had expectations about a handheld gaming system when Rare founder Tim Stamper went to Consumer Electronics Show in the US but he returned with news about a completely different handheld gaming system. This was in the days before the internet and you couldn't just pick up the latest photos and news from the show floor on websites like today. I can't remember whether we had to wait for a monthly magazine or got something shipped from Japan, but the first time I saw a Game Boy I just thought it looked like a little arcade cabinet in your pocket."

This new machine inherited one vitally important design aspect from its ancestor the Game & Watch – an 8-way

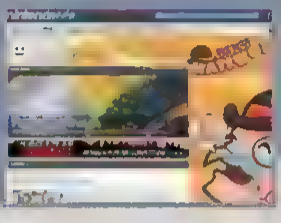


COMMUNITY

Euro-Asia Game Boy

LittleSoundDJ Workshop

Nintendo Life



World of Game Boy

INFORMATION

Year released: 1989

Original price: £69.99

Buy it now for: £5

Associated magazines: GB Action, C&VG Go! supplement, Mean Machines, Nintendo Magazine System

Why the Game Boy was great... It offered true portability in an era when manufacturers were seemingly failing over themselves to produce battery-hungry behemoths that required you to carry a power supply with you at all times. With excellent support from practically every software publisher on the face of the planet, the Game Boy effortlessly overcame its monochrome shortcomings to become one of the most successful pieces of videogame hardware the world has ever seen.

digital pad, or 'D pad' as it's more commonly known as. We take this interface for granted now but it was Yokoi and his team at R&D1 that developed the concept, sensing that joysticks would impinge on a handheld's mobility, Yokoi concocted the D-pad – a flat controller that wouldn't protrude from the casing of any handheld it was applied to. The concept also found its way onto the NES, where it was equally successful. The NES in turn influenced other aspects of the Game Boy interface – the familiar A and B buttons were present, along with the 'Select' and 'Start'. This shared control method was beneficial in two ways. It allowed NES owners (and there were plenty of them) to effortlessly pick up the play this shiny new portable, and it also made it easy to port popular NES franchises to the machine.

As the Japanese release date approached, Nintendo confessed that it had high hopes for the device, president Hiroshi Yamauchi confidently predicted that it would sell over 25 million in the first three years – quite a bold claim, for the time. There might have been quite a few people that scoffed at such optimism, but when the machine effortlessly sold 300,000 units in its first day on sale in Japan in 1989, such scepticism seemed foolishly misplaced. It was painfully obvious that Nintendo, and Yokoi, had struck gold once again.

> **"Battery life helped the Game Boy to win the war"**

Software played a massive role in this victory and no game is more significant in shaping the Game Boy's history than the ultra-addictive puzzle title *Tetris*, created by Russian programmer Alexei Pajitnov. Although this legendary title was already widely available on PC at the time, its appearance on the Game Boy is arguably the reason why it is remembered so fondly today. CEO of Nintendo of America, Minoru Arakawa witnessed a demonstration of the puzzler at a trade show in 1988 and moved quickly to ensure that *Tetris* would become the Game Boy's first 'killer app'. It was included as a pack-in title in every region except Japan and would become instrumental in cementing the console's reputation as a 'must have' gadget in the US, where the initial shipment of one million consoles sold out within a matter of weeks.

As was the case with the Game & Watch, the Game Boy used LCD technology, but instead of static images it boasted a 'dot-matrix' screen and could therefore display 160 by 144 individual pixels. It was monochrome, lacked lighting and could only display four different shades of grey, but it is unquestionably one of the reasons why the console was such an enormous success. It meant that the machine was incredibly energy efficient by the standards of the time, and although it's rumoured that several of Nintendo's executives put pressure on Yokoi to adopt a more visually impressive colour screen, his approach was ultimately vindicated when rival manufacturers released their full colour, backlit portable machines onto the market shortly after Nintendo's handheld launched, battery life was dismal and this factor undoubtedly helped the Game Boy to win the war. "Kids hate replacing batteries; it requires having to ask your parents for something," chuckles Dylan Cuthbert, former Argonaut employee and Managing Director of Q Games. "The longer a machine can run, the more people enjoy themselves and want to play more games on it."

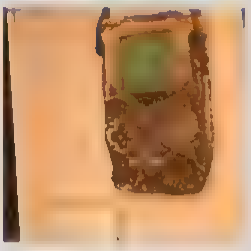
However, while it was easy on power consumption, the Game Boy's simple screen wasn't adored by everyone and even at the time there were rumblings of discontent over its bluriness. Fast-moving objects were incredibly hard to see, which made some games difficult to play. "You didn't want lots of the screen to have a lot of detail that was moving continuously," explains Rare's Chris Sutherland. "It meant keeping the backgrounds plainer or ensuring there were pauses in the scrolling. Objects like bullets had to be made larger, or with significant outlines so that players could more easily spot them." This problem was amplified by the fact that the screen functioned best when viewed in direct light, to tackle this problem a wide variety of bolt on peripherals were developed that not only added light sources but also magnified the display. The usefulness of such devices was questionable at best; when installed they rendered the Game Boy distinctly un-portable.

More software followed, with early hits such as *Super Mario Land*, *Baseball*, *Castlevania II: Belmont's Revenge* and *Contra* helping to keep interest in the console high. Just had been the case with the 8-bit NES, the Game Boy enjoyed a superlative degree of third-party support with all of the big names in the industry backing the console with their software. Konami, Square, Capcom, Irem and Hudson – as well as plenty of other publishers and developers – all pledged to support Nintendo. This resulted in an avalanche of software and made it very hard for rivals like Atari and Sega to gain a foothold, despite their more technically powerful Lynx and Game Gear hardware.

As the years rolled by, the popularity of the Game Boy remained buoyant while rival handhelds fell by the wayside. This success was no doubt assisted by quality games such as *The Legend Of Zelda*

» With the Game Boy, you could now play your games anywhere, alone or with friends.

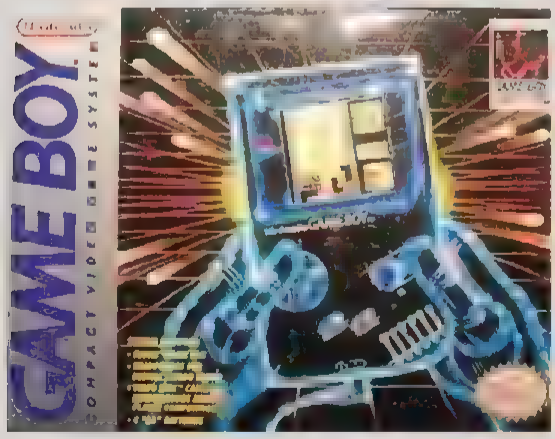
» An advert for Irem's Game Boy conversions of *R-Type* and *Kung Fu Master*.



» This Game Boy was owned by a US soldier and damaged in the Gulf War yet it still continues to function and is on display at the Nintendo World Store in New York

Link's Awakening, *Super Mario Land II*, *Donkey Kong Land* and *Metroid II: Return Of Samus*. However, it was the Japanese release of the first *Pokémon* title in 1996 that catapulted the Game Boy into hitherto uncharted realms of commercial triumph. Sadly this second wind was something of a double-edged sword for the monochrome marvel. It resulted in Nintendo looking into successors for the ageing hardware (although without Yokoi's help – he had left the firm in disgrace after the failure of the Virtual Boy and would later meet a tragic end in a road traffic accident), and the first baby steps were made with the Game Boy Pocket in the same year that *Pokémon* made its Japanese debut.

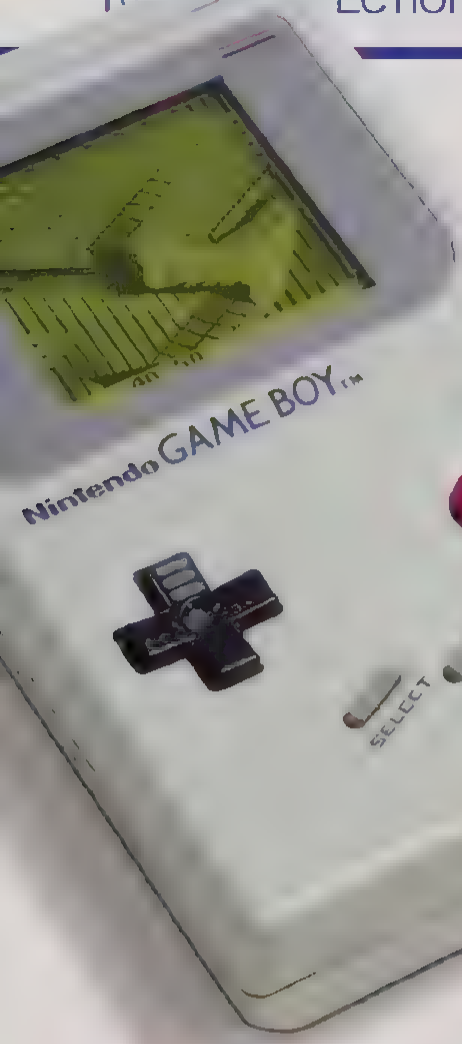
Essentially a scaled-down version of the machine that boasted a sharper screen and ran on two AAA batteries, the Game Boy Pocket revitalised hardware sales and was a much-needed aesthetic update which kept the console relevant in the increasingly fashion-conscious PlayStation era. However, another upgrade wasn't far off and this time Nintendo would enhance the concept far more convincingly – the Game Boy Color delivered the bright and attractive visuals that fans had been clamouring for since the early Nineties and although the machine was based heavily on the existing Game Boy tech (it was even backwards compatible with existing black and white software), it essentially spelt the end for the original 'breeze block' version of the machine. As the Color variant gained popularity, over 50 million of its monochrome siblings were relegated to the back of drawers and cupboards the world over.



Given the massive popularity of the Game Boy, finding programmers with experience of creating software for the machine is like shooting ducks in a barrel. "I first encountered the Game Boy the first day I started working at Rare back in mid 1989, and it hadn't even been released then, so it was definitely a surprise," recalls Sutherland. "Although the original looks a bit bulky nowadays, back then it seemed impressively compact."

However, in those early days, coding for the Game Boy wasn't exactly a walk in the park. "Part of the challenge in developing for Game Boy was that there was limited documentation, it was usually some very basic hardware information that was translated from the Japanese," continues Sutherland. Thankfully the CPU that powered the portable was at least known to programmers. "At the Game Boy's heart was a castrated Z80 – a CPU I was very familiar with from the Spectrum and Amstrad CPC," explains Jon Ritman, the legendary coder behind *Head Over Heels* and the superlative *Monster Max* on the Game Boy. "They had taken out a few useful features such as the 16-bit instructions and they had also removed most of the registers. The memory was paged in and out to give you access to a lot of memory – far more than a Spectrum could address – but the paging could be hard to manage. However, it was great that it had far more memory than was used to."

Explaining the inner workings of any games machine in lay terms is tricky, but Rare's Machacek is happy to run through the basics. "It boasted very simple screen architecture with a single character mapped screen that you could scroll," he says. "A small bank of characters for background, a similar size bank for sprites and a third similar size bank shared between background and sprites. We were always fighting



with that one because it was a juggling act between optimising the background enough to free up space to include the sprites you needed. Just to get this juggling in perspective, if each unique character available in both of those banks for the backgrounds were only displayed once on screen, you'd only fill a quarter of the visible screen space. Just like the NES, you really had to use a lot of repeated characters to fill the background. If you were doing a big long scrolling level with lots of unique scenery then massive amounts of downloading to the banks had to take place."

Many programmers found that working on the Game Boy was preferable to coding for other popular platforms, including its domestic brother, the NES. "I learned to program on a 6502 processor system, rapidly switching to Z80 ones before joining Rare in 1988," remembers Machacek. "Working initially on the NES brought me back to 6502, but the Game Boy allowed me to return to Z80 which I preferred. In some ways the Game Boy seemed a step up from other systems I had used; the Amstrad CPC 464 had no sprites and the ZX Spectrum – which I love to bits – had attribute problems. Aside from the lack of colour, it was a very similar format to the NES that we were already working with." In fact, the machine's four-shade greyscale screen was seen as a bonus by some programmers. "I had been making games for the Spectrum that were using the screen as just two colours, so monochrome didn't phase me at all," comments Ritman. "Four shades was heaven for me – it was two more than I had been using on the Spectrum!" Over time various tricks were developed in order to work around the shortcomings of the display. "We were very clear that sprites needed to stand out clearly from backgrounds, and the backgrounds would blur a bit when you scrolled quickly due to the lag on the display," says Machacek. "Efforts were made to give important sprites, like the player character, strong outlines to help delineate them from the rest, though."

On the audio side of things the Game Boy offered an additional challenge for coders. "The sound chip was interesting," comments Cuthbert. "It had a 'user wave table' of something daft like 20 entries, each of which was 4-bit, so if you could refresh it quick enough it could play sampled sounds, albeit very low-res samples. It also had a more regular FM-style chip and a noise generator." Getting the

» *CAVG* produced a supplement called Go! that was devoted to handheld machines, with the Game Boy being the main focus.

INSTANT EXPERT

The Game Boy isn't actually the first machine to use interchangeable game cartridges. Milton Bradley's Microvision, released a decade before in 1979, has that honour.

The Game Boy version of *Tetris* has shifted an astonishing 33 million units worldwide, although this includes all copies bundled with the machine itself.

The link cable allows simultaneous multiplayer gaming, but it had other uses – for example, *Pokemon* used the cable to exchange data between game packs.

Over 450 million Game Boy games have been sold during its lifespan.

Although the Game Boy has a reputation of being a system aimed at younger gamers, Nintendo's early strategy was to target older users, and the first adverts reflected this stance.

Nintendo developed an accessory called the 'Work Boy' which featured a mini keyboard and a cartridge that held programs such as a calendar, measurement conversion tool and a phone book. It was never released.

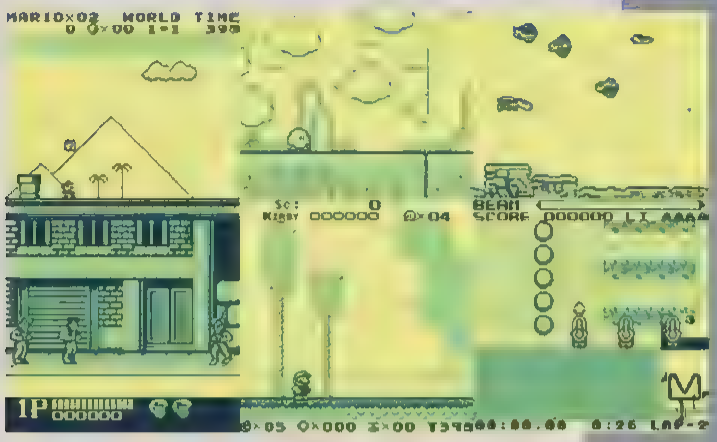
The four AA batteries required by the Game Boy provide roughly 35 hours of play time.

One of the most creative peripherals released for the system was the Game Boy Camera, which allowed users to take 128x112 pixel black and white shots, and then print them out using the Game Boy Printer.

Famous Game Boy owners include Robin Williams, Vanilla Ice, Will Smith, Bruce Willis and, er, Danny Baker.

A 4-player adapter was also released which allowed games to support more than 2 players, linking several of these up allowed 16-player skirmishes in *Faceball 2000*.

» The camera add-on enabled you to take grainy monochrome pictures.



» [Game Boy] The sheer range of games, including great third-party support, gave the Game Boy the edge over rivals

» With this add-on you could print out images from the Camera and certain games

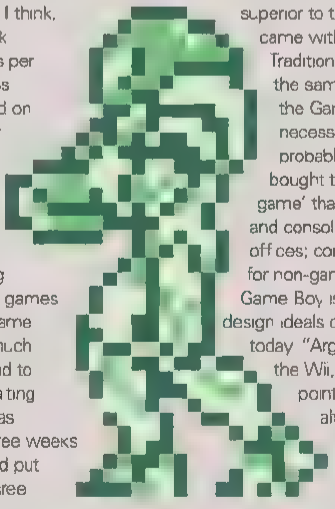
» The Game Boy's ad campaign pushed all the right buttons

most out of this humble setup was no easy task. "The engineers at Rare dabbled with the basic sound effects that our own wave-based audio system could supply," recalls Machacek. "Most of the engineers at Rare didn't understand it that well, I think Mark Betteridge was the only one of us that really knew how to get the sound he wanted. Later on we did incorporate some sound sampling into some titles and were able to play back low quality sampled audio for specific purposes."

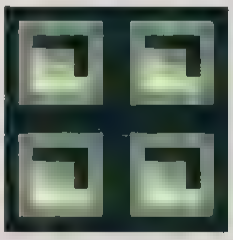
When coding for the Game Boy, many developers found that its similarity with the NES was immensely beneficial. "It was obviously a little less powerful, but many tricks we used on the NES translated well," recalls Machacek. "Having pseudo scrolling screens by using a repeating character pattern in places and downloading a repeating 'texture' to them that appeared to scroll was often seen. We always crammed in lots of carefully timed parallax scrolling effects as well. Access to the video RAM was limited, and the space for characters and sprites was small, so you constantly had to download artwork to the video RAM but could only do a little bit per frame. Trying to super-optimise your download code so that it wasted no time and shifted as much data as possible really paid off. I think, between judicious use of H-Blank as well as V-Blank downloading I managed to shift about 24 characters per frame, which allowed us to do the sort of animations that appeared in *Donkey Kong Land* in 1995." Based on the groundbreaking CGI rendered SNES hit *Donkey Kong Country*, this highly enjoyable platformer is arguably the title that pushed the original Game Boy to its absolute limits, and Machacek is proud of what he achieved. "I deliberately sat down and spent three weeks doing nothing but engine work to get it to a point that it could handle anything we threw at it," he remembers. "At that time many games were downloading about six to eight characters a frame to the video bank and *Donkey Kong Land* needed much more than that with all of the rendered artwork it had to drive. I do know that my lead artist got fed up of waiting for me to finish this work! It was techy stuff that was invisible to him, and you have to understand that three weeks to write an engine seemed like an age when we had put out the Game Boy version of *WWF Superstars* in three months flat – including testing – a couple of years earlier. But the *Donkey Kong Land* engine was able to shift 24 characters a frame by the end, and suddenly we were able to drive a lot of rendered artwork. I don't think anyone complained after that, especially when it sold 4 million units!"

> **"That perfect marriage of Tetris and the Game Boy found a new audience"**
>
> PAUL MACHACEK, PROGRAM MANAGER, RARE DESIGN

Having played an integral part in the success of this near-legendary console by coding some of its most memorable titles, it seems almost churlish to ask them what made the Game Boy so popular but we'll do it anyway. "In the 1980s there were plenty of dedicated handheld, battery-powered gaming machines," says Machacek. "You'd buy a *Space Invaders* handheld, or a *Pac-Man* one, or whatever. Here we had a single device that you could buy lots of games for and carry them all around simply. It was far superior to those other machines in every way and even came with multiplayer capability if you had a cable. Traditional gamers were now on the move. But at the same time, that perfect marriage of *Tetris* and the Game Boy found a new audience that weren't necessarily into games, and didn't even realise probably that you could buy more games, but simply bought the 'toy that plays that funny little blocks game' that their friends had. Unlike home computers and consoles, the Game Boy could be taken to school or offices; combined with the low price, this was enough for non-gamers to get sucked in too." The legacy of the Game Boy is considerable and some insist that Yokoi's design ideals continue to influence Nintendo's thinking even today. "Arguably Yokoi's philosophy has continued with the Wii," states Sutherland. "The lower spec and price point meant it has a larger initial potential audience, although remember the games are always what actually drive the sales – that's why people buy it, not because of the hardware. *Tetris* was to Game Boy what *Wii Sports* is to Wii."



» "There's nowhere you can't play it" – this print advert once again confirmed that the Game Boy was targeting 'cool' gamers rather than kiddies.



PERFECT TEN GAMES

There's a worrying number of licensed platformers on Nintendo's handheld, but also a lot of genuine gems. If you're thinking of buying a machine or adding to an existing collection, make sure you at least own the following

THE LEGEND OF ZELDA: LINK'S AWAKENING

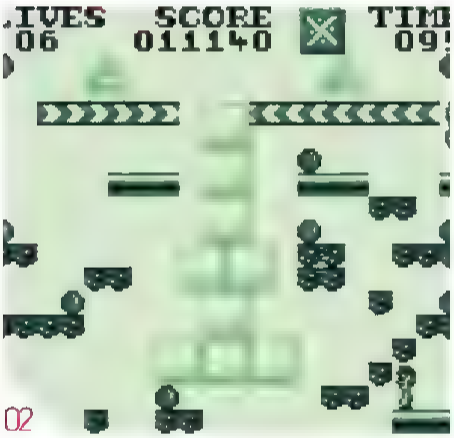
» **RELEASED:** 1993
» **PUBLISHER:** NINTENDO
» **CREATED BY:** NINTENDO
» **BY THE SAME DEVELOPER:** F-ZERO

01 **Although it features** an ending that's the Link equivalent of finding Bobby Ewing in the shower, this charming adventure remains one of the Game Boy's best titles. Set on the island of Koholint, *Link's Awakening* has the intrepid adventurer trying to awaken the mystical Wind Fish. His trials take him through some fantastically designed dungeons, see him battling some impressive bosses and generally meandering around a beautifully detailed world. The lack of certain *Zelda* elements – it's not set in Hyrule and Ganon's nowhere to be seen – may upset some, but you'll be doing yourself a grave disservice if you turn your nose up at Link's first portable adventure. A true classic.

BILL & TED'S EXCELLENT GAME BOY ADVENTURE

» **RELEASED:** 1991
» **PUBLISHER:** LJN
» **CREATED BY:** BEAM SOFTWARE
» **BY THE SAME DEVELOPER:** TRANSFORMERS: ARMADA

02 **Licensed platformers are** often nothing more than a cheap cash-in at the expense of whichever movie they're based upon. Nobody passed this information on to Beam Software though, for which we're eternally grateful. Playing like a Nineties update of *Chuckie Egg*, *BATEGBA* is quite frankly fantastic fun and should be sought out by anyone with a love of platformers. Yes it looks incredibly basic, but the cunning level design, incredibly tight controls and overall slickness more than make up for its graphical shortcomings. Perfect proof that you don't have to be Nintendo or rely on well-known videogame stars in order to make a genuinely excellent (sorry) portable platformer.



R-TYPE

» **RELEASED:** 1991
» **PUBLISHER:** IREM
» **CREATED BY:** BITS STUDIOS
» **BY THE SAME DEVELOPER:** LAST ACTION HERO

03 **Although superseded** by the incredibly polished *R-Type DX*, this remains the best blaster on the Game Boy. An astonishingly polished port, *R-Type* looks and sounds amazing due to its accurately drawn sprites – right down to a near perfect miniaturised version of Dobkeratops – and impressively authentic music, and plays like a proverbial dream. Yes it's just as annoyingly tough as its arcade parent, but the stunning level design, exceptionally constructed bosses and addictive gameplay will keep bringing you back for more. It's one of the best arcade ports the Game Boy ever had and is a must for shoot-'em-up fans everywhere.

SUPER MARIO LAND

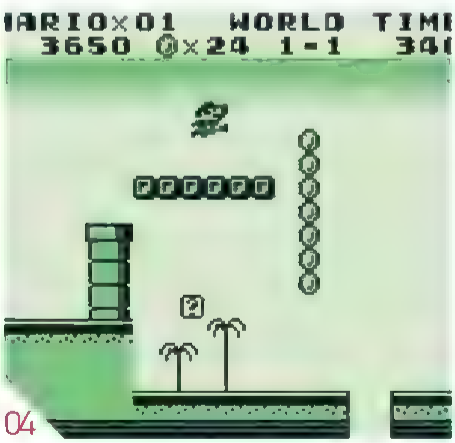
» **RELEASED:** 1989
» **PUBLISHER:** NINTENDO
» **CREATED BY:** NINTENDO
» **BY THE SAME DEVELOPER:** DONKEY KONG

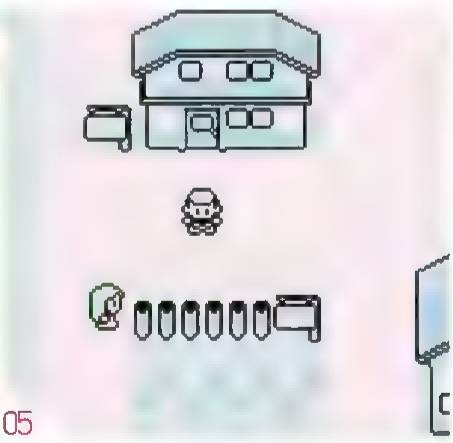
04 **Its successors certainly** boasted far more spit and polish, but in terms of fantastic gameplay hardly anything else on the Game Boy comes close to Mario's first handheld outing. Bowser has been replaced by the sinister-sounding Tatanga while Luigi and Princess Peach are nowhere to be seen, but don't let that put you off as *Super Mario Land* is as good as anything that appeared on Nintendo's home systems thanks to its cleverly designed levels, perfect controls and polished gameplay. Mario even finds time to jump into a sub and plane for some fun shmup action. A superb platformer that sold 18 million copies.

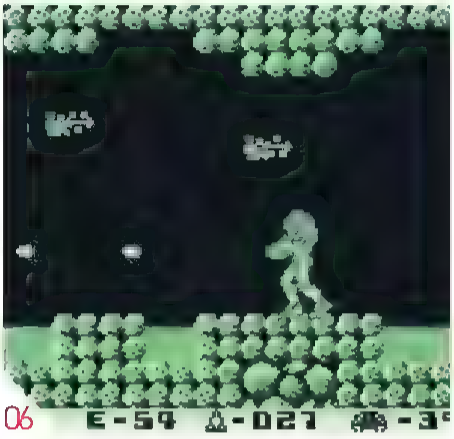
POKÉMON RED/BLUE

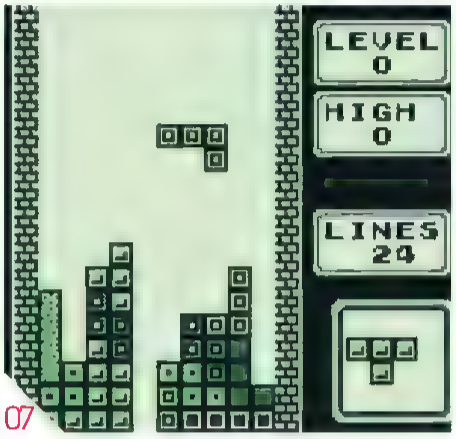
» **RELEASED:** 1996
» **PUBLISHER:** NINTENDO
» **CREATED BY:** GAME FREAK
» **BY THE SAME DEVELOPER:** MARIO & WARIO

05 **By the time** UK gamers were able to sample the delights of Game Freak's ridiculously absorbing RPG, both *Pokémon Red* and *Blue* had already been available in Japan for three years! The lengthy wait was well worth it, however, and while the series has since gone on to become a global merchandising phenomenon, it's important to remember that Game Freak's first two games were as captivating as they were original. Full of charm and recapturing the trading card craze that used to sweep schools, it took a serious amount of patience and strategy (not to mention a few friends) in order to capture all 151 of Game Freak's cute critters.









METROID II: THE RETURN OF SAMUS

- **RELEASED:** 1992
- **PUBLISHER:** NINTENDO
- **CREATED BY:** INTELLIGENT SYSTEMS
- **BY THE SAME DEVELOPER:** ADVANCE WARS

06 **Samus's second outing** is generally considered to be one of her worst, but we'd have to disagree. Sure the graphics take a hit on the Game Boy's tiny screen, and the environments are bland as hell, but it's the gameplay that matters and *The Return Of Samus* delivers in spades. Huge and sprawling, it rewards exploration and expands on the gameplay that made the original *Metroid* so enjoyable. Add in some impressive boss fights and a more refined Samus who's far easier to control than her NES counterpart and the result is a wonderful adventure that just keeps on giving.

TETRIS

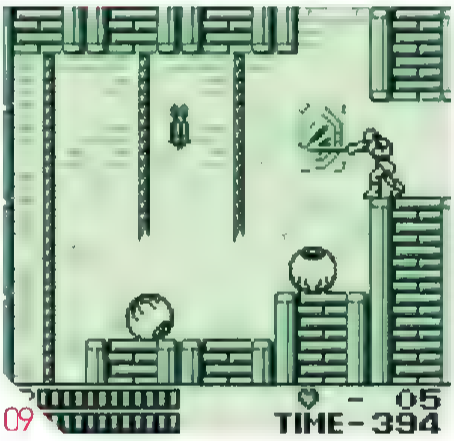
- **RELEASED:** 1989
- **PUBLISHER:** NINTENDO
- **CREATED BY:** BULLETPROOF SOFTWARE
- **BY THE SAME DEVELOPER:** YOSHI'S COOKIE

07 **With Nintendo now** being hailed as the saviours of gaming due to the Wii and DS ensnaring brand new gamers, it's easy to forget that it managed to do exactly the same thing with the Game Boy and *Tetris*. Everyone from your best mate to your granny was playing Alexei Pajitnov's classic puzzler back in 1989, no doubt helped by the fact that it was bundled with the Game Boy. Worryingly addictive and sporting that 'one more go' factor, it was a true killer app for the machine and proved that you didn't need flashy graphics or even colour to captivate the masses. Just a damned good game.

FACEBALL 2000

- **RELEASED:** 1991
- **PUBLISHER:** BULLETPROOF SOFTWARE
- **CREATED BY:** XANTH SOFTWARE F/X
- **BY THE SAME DEVELOPER:** GATO

08 **What do you** get when you cross forum emoticons with *Doom*? This gem of a first person shooter still looks astonishing on the Game Boy's tiny screen, despite its slow pace. A port of the Atari ST's *Midi Maze*, *Faceball 2000* can support death matches for up to 16 players. The solo mode is effectively a take on *3D Monster Maze* where you have to guide your HAPPYFACE (Holographically Assisted Physical Pattern Yielded For Active Computerised Embarkation) through 70 increasingly complex mazes, but it's the multiplayer where *Faceball 2000* truly shines. Of course finding 15 other players may be a little tricky now.



CASTLEVANIA II: BELMONT'S REVENGE

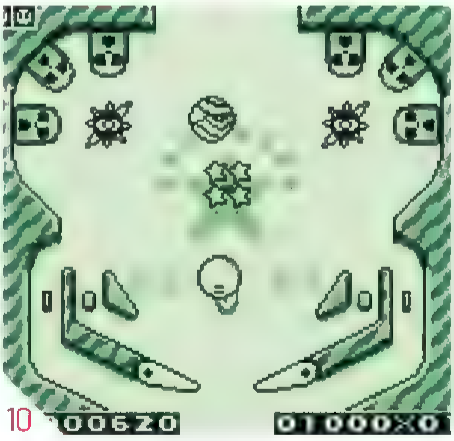
- **RELEASED:** 1991
- **PUBLISHER:** KONAMI
- **CREATED BY:** KONAMI
- **BY THE SAME DEVELOPER:** MYSTICAL NINJA

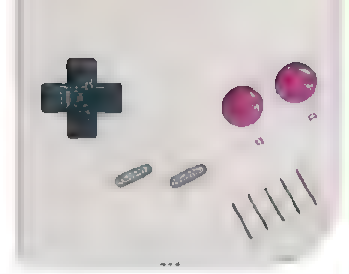
09 **If the only** Game Boy *Castlevania* you've ever played is the godawful original, then don't be put off by this sequel. Realising what a hash it had made with the series' first portable debut, Konami went back to the drawing board, meaning that *Belmont's Revenge* is not only worthy of the franchise but easily one of the best examples of the genre to be found on the Game Boy. Although there are only four levels, they're extremely large in size, brilliantly designed and feature a range of familiar enemies and bosses. Audio is also impressive, easily matching the excellent tunes that appeared in the NES games. In short, an essential addition to your Game Boy library.

KIRBY'S PINBALL LAND

- **RELEASED:** 1993
- **PUBLISHER:** NINTENDO
- **CREATED BY:** HAL LABORATORY
- **BY THE SAME DEVELOPER:** ADVENTURES OF LOLO

10 **We came oh** so close to nominating the excellent *Revenge Of The Gator* here – also by HAL Laboratory – but *Kirby* is just the better pinball game. Featuring superior physics, a total of three different tables to battle on – each with its own mini-game – and some extremely lush looking visuals, *Kirby's Pinball Land* is a great little title that will bring out the score attack fiend in everyone. The lack of a multiplayer mode is a little annoying, but this has been put together with so much care and attention that it's impossible not to love. Worryingly addictive and likely to give you extremely sore thumbs, it's another essential game that your Game Boy shouldn't be without.



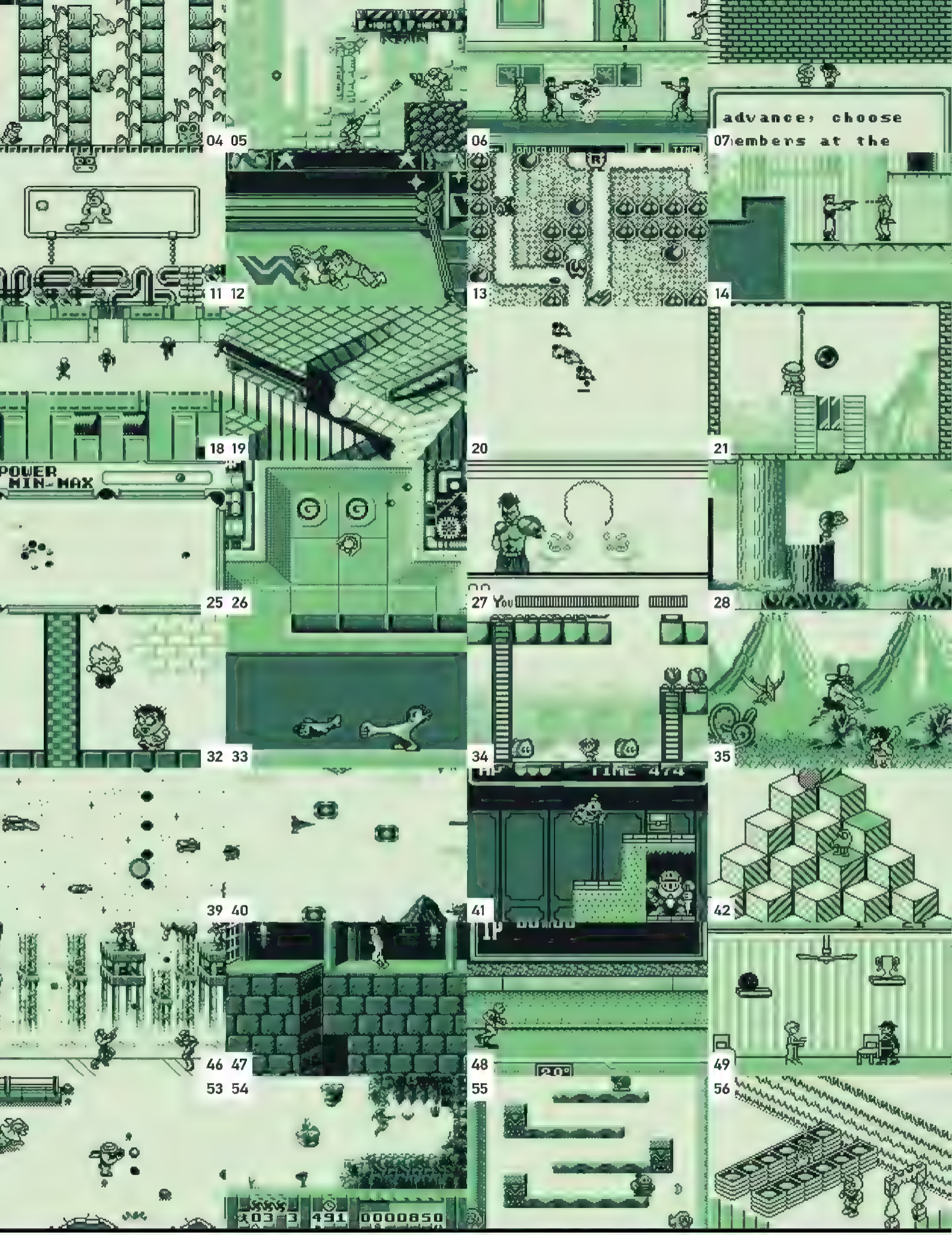


GAME BOY

and the rest...

Look amongst all the licensed tat that was available on Nintendo's handheld and you'll find some truly cracking games. Don't believe us? Then just take a look at this little lot

01 ADVENTURE ISLAND
02 CHASE HQ
03 STAR WARS
04 GODZILLA
05 BIONIC COMMANDO
06 KWIRK
07 FINAL FANTASY LEGEND
08 ALLEYWAY
09 YOSHI
10 LEMMINGS
11 MEGAMAN II
12 WWF SUPERSTARS
13 MR DO!
14 NAVY SEALS
15 DARKWING DUCK
16 EARTHWORM JIM
17 SHADOW WARRIORS
18 ALIEN 3
19 MARBLE MADNESS
20 SUPER KICK OFF
21 PANIC
22 GAUNTLET II
23 BALLOON KID
24 X-NON 2: MEGABLAS
25 SIDE POCKET
26 OUT OF GAS
27 BOXING
28 SUPER HUNCHBACK
29 GHOST BUSTERS
30 BOMBUZAL
31 POPEYE 2
32 KID DRACULA
33 FELIXBOY
34 RODLAND
35 JOE & MAC
36 TENNIS
37 FELIX THE CAT
38 DOUBLE DRAGON
39 R-TYPE II
40 NEMESIS
41 DUCKTALES
42 QBERT II
43 HYPER LODE RUNNER
44 ELEVATOR ACTION
45 MICKEY MOUSE
46 CONTRA
47 PRINCE OF PERSIA
48 TRACK & FIELD
49 HOME ALONE
50 WORMS
51 MEGAMAN III
52 CASTLEVANIA ADVENTURE
53 JURASSIC PARK
54 TURRICAN
55 SNOW BROS JR
56 MONSTER MAX


04 05
06
07
advance; choose
embers at the
11 12
13
14
18 19
20
21
POWER
MIN-MAX
25 26
27 You
28
32 33
34
35
TIME 474
39 40
41
42
1P
46 47
48
49
53 54
55
56
03 3 491 0000850

The Making Of...

RESIDENT EVIL

With Resident Evil 5 now available, Shinji Mikami describes the development of 1996's seminal first Resi game to Retro Gamer's Jonti Davies. Scary stuff

» [PlayStation] Brooding and atmospheric. It's amazing to think that the first six months of *Resident Evil* was handled solely by Mikami. A rare example of a newer game being led by one man's vision

» [PlayStation] While many found fault with *Resident Evil*'s cumbersome controls, the direction of cut-scenes was absolutely superb. Only Hideo Kojima's *Metal Gear* franchise comes close.

Shinji Mikami is a very likeable guy who is not afraid to speak his mind. For a start, he says, the *Resident Evil* title is a "stupid" one. The Western title for his made-in-Japan horror epic is, he reckons, completely nonsensical. (Capcom America proposed the Anglicised term; Mikami had no say in its selection.) *Biohazard*, the series' original Japanese title, is the only term he will use as we discuss the games. And that's fair enough: after all, he is the creator of *Resi*– sorry, *Biohazard*.

"*Biohazard*'s starting point came when my boss at the time – Fujiwara-san [Tokuro Fujiwara, Capcom's general manager] – told me to make a horror title using the game system of *Sweet Home*," Mikami explains. The game he's referring to here was a minor hit for Capcom on Nintendo's Famicom at the end of 1989. Itself a videogame adaptation of a Japanese horror flick.

The parallels between *Sweet Home* and *Biohazard* are fairly extensive – *Biohazard*'s door opening sequences are lifted from *Sweet Home*, while some of the games' settings are shared – yet it would be unfair to both titles if we were to suggest that *Biohazard* was a mere copy of *Sweet Home*. It wasn't – Mikami's game brought too many new ideas to the table to be written off as nothing more than a homage. Still there's no denying that it drew inspiration from certain aspects of that old cassette.

"My first aim," Mikami recalls, "was to create something that could provide the scariness of an amusement park's Haunted House, at home. For me, the things I've always been scared of the most are ghosts, so I was considering producing a game full of evil spirits. Thinking about it, though, in the capacity of a game, there wouldn't be any real feeling of exhilaration if you were shooting at, or attacking, ghosts. When I realised that during the initial planning stages of development, I decided to scrap the ghost idea and find a different type of enemy threat."

With the notion of a Haunted House-style horror game ditched, Mikami went back to the drawing board and sketched a different, yet equally scary, proposition: "I ended up realising that the game's enemies needed to be monsters of some description, as close as possible to humans in form, rather than spirits. Yes, I thought – zombies! At that time, I recalled the film, *Dawn Of The Dead*; I loved that film. It was unfortunate, as far as the audience was concerned, that they couldn't survive, but with a game, the players could use their own techniques and thinking in order to survive the experience. I thought that this difference between horror games and horror movies could be something wonderful. That was the moment when I conceived *Biohazard*."

It might sound as though Mikami is being a spot egotistical in claiming that *Biohazard* was his alone, but it's entirely true. "For the first six months of development," Mikami explains, "I was the 'team'. Six months down the line I was joined by another planner, but after three months of working together he left to do development work on another project. From month nine onwards, the number of personnel suddenly increased to 15, and from that time on, the team gradually increased in number.

IN THE KNOW

» PUBLISHERS: CAPCOM

» DEVELOPER: IN-HOUSE (PRODUCTION STUDIO 4)

» RELEASED: 1996

» GENRE: SURVIVAL HORROR

» EXPECT TO PAY: £5+

"I KNEW THAT IF BIOHAZARD WASN'T A BIG SUCCESS THERE WAS A DANGER THAT CAPCOM WOULD FACE BANKRUPTCY"

BIOHAZARD WAS MAKE-OR-BREAK FOR CAPCOM, SAYS SHINJI MIKAMI

MORE FROM MIKAMI

ALADDIN (SNES, 1993)
Shinji Mikami worked as a 'planner' on this charming Disney-licensed 2D platformer. It's par for the course, really, but the lush graphics and neatly conceived level design makes for a game that can still be enjoyed today.

GOOF TROOP (SNES, 1994)
By the time he was given another crack at turning Disney properties into entertaining videogame fare, Mikami had been promoted to the role of lead game designer. *Goof Troop* borrows heavily from *A Link To The Past*, but that only assures its quality.

DINO CRISIS (PLAYSTATION, DREAMCAST, 1999)
Mikami worked as producer on this *Resident Evil*-meets-*Jurassic Park* and, surprisingly, it was nowhere near as bad as its hodgepodge concept suggested it could be. Definitely worth a play through.

[illegible] (GAMECUBE, 2003)
This underrated GameCube classic was directed by Shinji Mikami as part of his and Capcom's drive to support Nintendo's last 'traditional' games console. It's a frantic and stylish shooter that continues to resonate half a decade on.

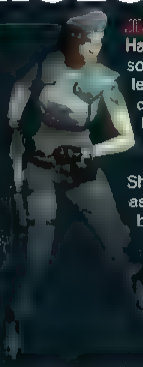
GOD HAND (PLAYSTATION 2, 2006)
Another unfairly dismissed Shinji Mikami game, *God Hand* is a darkly comedic beat-'em-up/adventure crossover with the kind of outlandish, bizarre move sets that you'd most often see in a Suda 51 production. Quirky, but so much fun.

The Making Of . . .

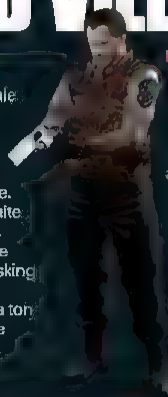
RESIDENT EVIL

HEROES AND VILLAINS

CHRIS REDFIELD
Mikami's favourite Biohazard protagonist is also, he laughs, quite ugly and not particularly cool. But that's the way he was designed, and Chris Redfield's battle against the zombie masses is every bit as tough as he looks.



JILL VALENTINE
Hardly a typical soft/sensitive female lead, Jill Valentine can easily hold her own against rabid zombified dogs and the like. She may not be quite as strong as Chris, but she does have greater multi-tasking abilities and is able to carry a ton of items while picking locks.



BARRY BURTON
Good old Barry is Jill's reliable buddy throughout the course of her adventure. His comedy one-liners (intentional or otherwise) never fail to ease the tension, but he's also a mean shot, easily popping bullets in putrid zombie flesh.

REBECCA CHAMBERS
The essential nurse character, capable of restoring people to health and stirring chemical concoctions, eventually becomes playable in *Biohazard*. She ends up supporting Chris during his adventure.

ALBERT WESKER
One of Mikami's favourite Biohazard enemies, Wesker is the kind of naggingly suspicious guy who you might expect to crop up in the Sixties *Batman* TV series. The real genius of Wesker is that nothing is particularly clear.

until, towards the end of development, we had more than 50 people working on *Biohazard*. On the planning/design side of things, [Hideki] Kamiya, [Hiroki] Kato and [Kazunori] Kadoi were the core members – the foundations. In the graphics department, [Jun] Takeuchi looked after character animation, and [Motoji] Fujita and [Ippei] Masuda were largely responsible for the background rendering. Programming and system development was essentially down to [Yasuhiro] Anpo. [Katsutoshi] Karatsuma worked on gameplay features, [Kiyohiko] Sakata on in-game events, and [Ippo] Yamada on sound."

Once the central team had been established, Capcom's Production Studio 4 quickly set about turning Mikami's ideas into tangible, playable realities. An early build of the game featured an over-the-shoulder camera system similar to that which would eventually be used in *Resident Evil 4*, but it soon became obvious the PlayStation hardware was not up to the task of managing such ambitious design. (At least, it didn't appear to be capable of such feats back in 1995.)

"You couldn't really call *Biohazard* 'beautiful' now," Mikami modestly admits. "It was incredibly difficult to produce the game for the PlayStation hardware back then. Initially it was intended to be a full 3D production, but we had to give up on that idea and modify *Biohazard* to use pre-rendering. If we hadn't done that, it would have been impossible to properly realise my plans for the game. For that reason [the switch to pre-rendered environments] the graphics became exceptionally good, though operability was sacrificed to achieve that. It was very difficult to manufacture the characters while reducing their polygon counts to a reasonable level."

The "operability… sacrificed" that Mikami speaks of is likely a euphemism for the notorious clunkiness (pre-*RE4*) of the characters' movement, with navigation of pre-rendered environments tied to an awkward D-pad control system where left and right became rotational inputs and up/down effected a strict forwards/backwards motion. Controlling Jill and Chris was the adventure game equivalent of steering a double-decker bus around a karting circuit. Since his original briefing from his manager had quite specifically requested a horror game, Mikami was determined to create something that would (in an in-game sense, literally) scare players to death.

"First of all," he says, "I began by coming up with a scenario that had an eerie atmosphere. The critically important point here was to create a world where you could see some evidence that people had been living there, and then introduce zombies so that players would happen to meet them within that kind of environment." The game's opening scene and scripting neatly emphasises how Mikami would set about achieving his goals, before Jill Valentine takes her first D-pad-guided steps into her scenario, some scrappy pixel text sets the tone. "They have escaped into the mansion . . . where they thought it was safe. Yet…" Fortunately, not all of the tension-building devices used in *Biohazard* were quite so crude. The door-opening scenes that linked rooms together were deliberately restrained – a door, a black

» **[GameCube]** Jill and Barry. When they're not backing each other up, they're sharing howlingly bad dialogue. Oh the humanity

» [PlayStation] *Resident Evil* may be getting on now, but certain aspects of its design still manage to impress.

» [PlayStation] You'll never forget the time you meet your first zombie

abyss of a background, and the cleanly sampled sound of a handle being turned and were extremely effective in boosting both the player's fear and anticipation levels.

"Another significant area was to ensure that a sense of fear would be generated by the events in the game," Mikami continues. "The motivation for this was that I wanted to shock players with the perfect timing of events, while also having strong control over the player's mentality, so that the fear factor would become self-reinforcing thereafter. We used features such as the zombies' moans and their footsteps as omens throughout the flow of the game. Even if you knew before looking round a corner that a zombie was going to be there, we set up blind spots so that players wouldn't be able to see the zombies immediately] and that in turn produced an uneasy feeling that caused players to feel afraid. I remember thinking if the enemies were only scary because of the possibility of 'game over', it wouldn't be sufficient for me to reach my goal with *Biohazard*. There had to be more to it than that."

"I WANTED TO SHOCK PLAYERS WITH PERFECT TIMING WHILE HAVING STRONG CONTROL OVER THE PLAYER'S MENTALITY"

MIKAMI HAD EVERYTHING PLANNED

Intriguingly, Mikami says that *Biohazard* could even have adopted a humorous angle (as in genuine, planned humour – not the occasionally funny scripting that cropped up in English-language translations of the game) were it not for a lack of development time. "In the planning stage," he reveals, "I had come up with an idea for a method where the game could switch to being a comedy after the third week of gameplay. I ended up discarding the idea when it became apparent that it would take an unreasonable amount of time to implement. I personally felt that the horror and comedy genres had many things in common and were very closely linked. I think if I'd had a chance to experiment more, the results could have been really entertaining."

Regardless of Mikami's decision to not turn *Biohazard* into the videogame equal of *Scary Movie* (probably a wise decision) his vision of how he wanted the game to be was largely realised. "Top of my list [of favourite things about *Biohazard*]," he starts, "is how we were able to realise a kind of scariness that would automatically put players on edge, even without them being consciously aware of it. I was also really pleased with the graphics in its day, at least, *Biohazard* looked real. Another of my favourite aspects was how the sound effects and music would make the player feel intimidated. And, of course, I was very pleased with how we presented the zombies in the game."

All of these elements – and others, such as the consistent and satisfying (if a little quaint) puzzles, the item-location tasks, the excellent FMV cut-scenes and the associated charismatic voice acting of the game's characters – combined to produce an experience that was a little different from

DEVELOPER HIGHLIGHTS

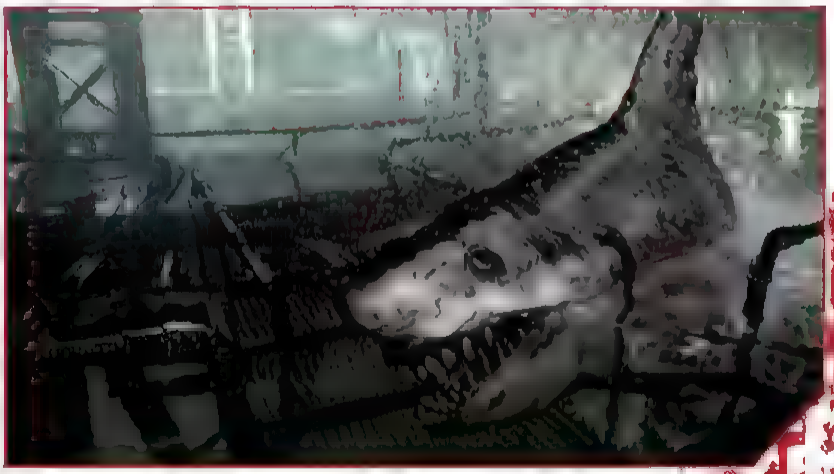
DINO CRISIS
SYSTEM: PLAYSTATION 2, DREAMCAST, PC
YEAR: 1999

P.N. 03
SYSTEM: GAMECUBE
YEAR: 2003

GOD HAND (PICTURED)
SYSTEMS: PLAYSTATION 2
YEAR: 2006

» [GameCube] Shinji Mikami was ecstatic about working on Nintendo's GameCube. His subsequent remake is one of the finest around and is far better than the Cube sequels that followed.

» [GameCube] *Resident Evil* is well known for its shock moments, with the doll's-eyed shark being a particularly fine example.



The Making Of . . .
RESIDENT EVIL

» [GameCube] Chris Redfield is also in *Resident Evil 5*, albeit with bigger muscles.

» [PlayStation] If you never jumped when the dogs made their dramatic entrance then you either lied about it or never played the game in the first place.

previously available attempts at the genre. Mikami's ascent from working as a planner on a few Disney-licensed SNES games to being charged with producing a next-gen horror game may seem like an odd career path, but he has always been a fan of darker entertainment. (He recently joked that it's no coincidence his initials are interchangeable with those of 'sadomasochism.')

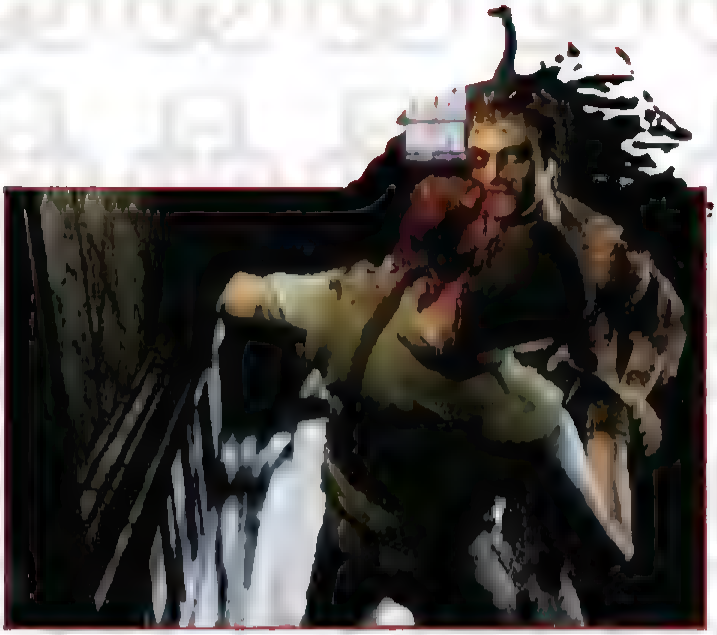
When Mikami first started planning *Biohazard* in January of 1994, neither Sony's PlayStation nor Sega's Saturn were on the market and Nintendo was in pole position in Japan (thanks to the broad success of the Super Famicom). *Biohazard* was never planned as a PlayStation exclusive, and logically Capcom was determined to hedge its bets by getting the game to appear on both upcoming formats. But that was easier said than done. "Initially," Mikami says, "we were moving ahead with simultaneous development on both formats [PlayStation and Saturn]. We carried on like that for about a year, but then that development program had to be suspended. It was hard enough making *Biohazard* for one piece of new, original hardware – developing it for two types of hardware at the same time was just too difficult because of a lack of development staff and a shortage of the necessary skills. That's why we decided to whittle things down to just the one console version." The Saturn version eventually arrived in July of 1997, some 16 months after the PlayStation original had been released in Japan, which was quite a blow for Sega.

You might well imagine that Capcom was confident it had a potential PlayStation hit on its hands, yet Mikami maintains that his employer was not completely supportive of the project. "During the development phase, I felt that the project wasn't being appreciated at all." It turns out that *Biohazard* very nearly didn't happen, as Mikami explains. "Capcom's consulting company at the time made a report that included a comment written like this: 'Discontinue *Biohazard* project.' I went mad! After seeing that, it just made me feel even more strongly that I would complete *Bio*, no matter what. And in the end, *Biohazard* was not discontinued. As I had suspected, it was Fujiwara-san who called for Capcom to let us continue with the *Biohazard* project. I only heard from Fujiwara-san himself roughly ten years after *Biohazard* was finished that he'd intervened in such a way, but it apparently saved the project."

Even though *Biohazard* was allowed to continue growing, Mikami admits that the development process was not particularly smooth. Part of the problem was the inexperienced staff – even Mikami himself was making his directorial debut on this project). "Except for myself, most of the staff on the *Biohazard* team

"CAPCOM'S CONSULTING COMPANY AT THE TIME MADE A REPORT THAT INCLUDED THE COMMENT: 'DISCONTINUE BIOHAZARD PROJECT'" SHINJI MIKAMI EXPLAINS HOW RESIDENT EVIL NEARLY DIDN'T HAPPEN

» [PlayStation] The name's Wesker. Albert Wesker. Quite possibly one of the coolest videogame baddies of all time.



» [GameCube] The visuals for Capcom's Resi update were a massive improvement over the originals and still look ace today

[were] newcomers to Capcom," Mikami reflects. "The team generally wasn't very experienced at all, and it meant we had to go through an awful lot of trial-and-error experimentation during the development process. In spite of that, the team had an incredibly positive attitude, and I'm sure that was connected to how we were able to produce such a good game."

Although the atmosphere inside Production Studio 4 was a positive one, Capcom struggled to keep the *Biohazard* team together. Mikami explains: "I remember now, because developing *Biohazard* was too difficult for them, one by one staff would resign from the job. I think everyone felt as though they didn't know what was what. It was a feverish atmosphere in [the *Bio*] development team. Along the way, it got to the point where our development tools weren't sufficient for what we wanted to do, so to compensate we worked double shifts to ensure that the team was working around the clock."

For those who had remained onboard the latter stages of development were predictably manic – but also, by the sounds of it, a bit of a fun riot. "The final stage of development lasted around six months," Mikami says, "and during that time the team were mostly living at work. It was a case of 'Super Hard Work' until 3am every night. At the time everyone was considered equal, and once it got to be past midnight in the studio our spirits became really high. People would be running around the development floor. We'd group together in pairs and push other development staff, who were sitting on chairs [with wheels], into the elevator, then press the button to send them to whichever floor we wanted them to go to and shout 'Sayonara!' We had all these funny customs," he laughs.

While Mikami and the team somehow managed to enjoy the hell of the last six months' work, there was also some awareness of the predicament Capcom found itself in at the time. Investors were becoming increasingly concerned about the profitability of the Osaka based developer-publisher, and without any sugar daddy at the top of the company to rely on (the likes of Sega and Namco were bankrolled by mega-rich owners, but Capcom has always been a more humble affair) murmurs of the dreaded 'B' word began to circulate. "Once the project was complete," Mikami says, "all of the staff felt a sense of accomplishment and they really celebrated its completion. On the other hand, I just felt relieved – and I seemed to be the only one who was completely burnt out. I knew that if *Biohazard* wasn't a big success there was a danger that Capcom would face bankruptcy, so I felt very strongly that I'd fulfilled my responsibility."

In the end, *Biohazard* did the business required of it and *Resident Evil* (to Mikami's chagrin) became a household name throughout the western world. "Biohazard sold more than twice the number of copies we were anticipating it might sell," Mikami clarifies. "To be honest, I was surprised by how successful it was. It was just a happy accident that the PlayStation market and the saleability of *Biohazard* matched so perfectly. I think we were very lucky."

With *Biohazard*, an international hit almost in spite of itself, the gore and scariness of the finished game only seeming to encourage greater sales and Capcom inevitably demanded more of the same. "Once the first game was finished," Mikami says, "Capcom told me immediately to make a sequel. Only, I was told to redefine my role for *Biohazard 2* as a producer, and at the time that really made me feel down," he sighs. Mikami's good friend Hideki Kamiya took on director's duties for the sequel, and it wasn't until 2002's *Biohazard 0* prequel that Mikami would again have chance to direct the action himself. As the template for what would become one of Capcom's most revered series, however, Mikami's creation of the original *Biohazard* game was sufficient to keep the sequels coming right through to 2010.

RESIDENT EVIL SEQUELS

RESIDENT EVIL: DIRECTOR'S CUT (1)
Released ostensibly to keep fans satisfied until *RE2* was eventually complete, *Resident Evil: Director's Cut* featured a collection of aesthetic alterations and DualShock support. It was bundled with a playable demo of the following year's sequel.

RESIDENT EVIL 2 (1998)
With Shinji Mikami moved to the role of producer, Hideki Kamiya took on the mantle of director for the first time in his career. Mikami simply oversaw Kamiya's work and made changes wherever necessary. A hugely successful sequel, even if it wasn't as scary...

RESIDENT EVIL 3: NEMESIS (1999)
Originally intended as an act of fan service, a side-story developed specifically for dedicated *Resident Evil* followers (its project name was *Biohazard 1.9*), *Nemesis* ended up as something of a jumble once Mikami's boss had told him to scrap that idea and make a proper sequel.

RESIDENT EVIL CODE: VERONICA (2000)
Moving away from the pre-rendered environments utilised by the first three games in the series, *Code: Veronica* was touted as a Dreamcast exclusive but was eventually ported to the PS2 and GameCube in slightly modified form. A real highlight for the series.

RESIDENT EVIL 0 (2002)
Rebecca Chambers returned as a main protagonist in this prequel to the first *Biohazard* outing. While it ended up as a GameCube title, *RE0* was originally planned as an N64-exclusive. One thing that's particularly noteworthy about it is its nifty character-swapping mechanic.

RESIDENT EVIL 4 (2004)
One of the best videogames of its generation, *Resident Evil 4* took the series in a new direction – via a camera change and a switch to real-time 3D – to at last achieve what Mikami had originally aspired to create in the mid-Nineties. The Wii version is our favourite.

RESIDENT EVIL: THE UMBRELLA CHRONICLES (2007)
Mikami had nothing to do with this one, having left Capcom after *RE4*. Still, *The Umbrella Chronicles*' odd perspective – Albert Wesker talks players through *House Of The Dead* territory – certainly adds some novelty to the series' mainline.

RESIDENT EVIL 5 (2009)
Resident Evil 5 arrives five years after *RE4*, with Mikami now as nothing more than a distant spectator. Its African setting has been controversial, but its online co-op mode really excels. Mikami says he probably won't bother playing it, as its inevitable flaws will annoy him.

THE CLASSIC GAME

TURTLES IN TIME

Occasionally it happens. A videogame comes along that flouts conventions, takes on the specialised guts and seductive garters worn by flashing coin-ops and betters its arcade forebear

Released in arcades in 1991, the sequel to Konami's colossal coin-op hit *Teenage Mutant Ninja Turtles* may not have swallowed nearly as much coinage as its four player predecessor, but it was certainly the better game. However it would take a brilliantly tweaked SNES port to really open our eyes to that fact.

Leonardo

The steadfast leader of the team is said to be the best all-rounder in game. His attacks are strong, his speed middling, and his reach is okay at best. Personally, we find Leo and Raphael to be the hardest characters to get along with.

Donatello

Ironically, the brain box of the team is actually the slowest character in the game. Along with Michelangelo, Donatello is probably the best character to pick. His attacks might be slow but his weapon gives him great reach.

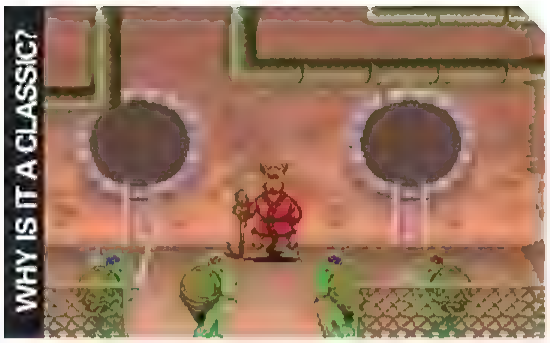
Raphael

The coolest character in the cartoon is the lamest in this game. He might be the speediest of his brothers but speed counts for nothing when you have to actually rub your head against an enemy to perform an attack.

Michelangelo

Apparently Michelangelo is said to suffer from short-range attacks, but we don't see it ourselves. Michelangelo's nunchucks prove both strong and offer good reach – making him easily one of the best characters in the game.

MEMORABLE MOMENTS

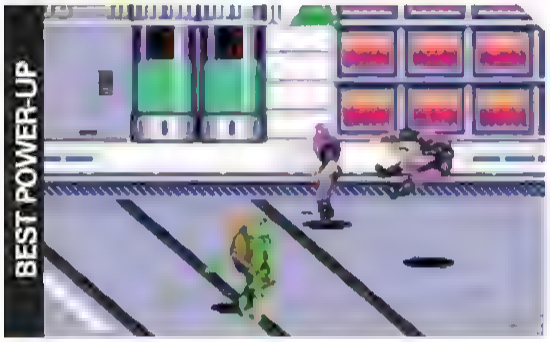


One of the best 16-bit arcade ports ever

Sure, *Street Fighter II* and *Strider* were great arcade conversions, but they certainly didn't outshine their coin-op counterparts. Even if you have a passionate hatred for the Teenage Mutant Ninja Turtles, or felt *Turtles In Time* grew very repetitive very quickly, you still have to admire Konami for pulling out all the stops for the home conversion of its unfortunately abbreviated *TIT*. Not since *Green Beret* and *Bionic Commando* on the NES had a home conversion bested its arcade counterpart in terms of both quality and overall enjoyment, because of this *Turtles In Time* joins a very exclusive club indeed.

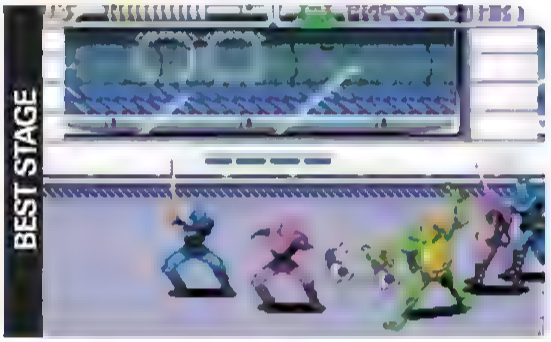
Donatello

Everyone knows that Donatello is the best character to take into a bout of claustrophobic Foot Soldier smashing. It has something to do with his long wooden shaft, which proves just too much of a handful for Shredder and his goons. The brainiac's bow staff offers brilliant reach – allowing people who are rubbish to keep a relatively safe distance from danger. Ironically, the turtles brandishing sharp impaling implements – Raphael and Leonardo – prove to be the worst characters in the game. While their weapons might look menacing, their airy fairy swipes and stabs feel horribly inaccurate and woolly in the throes of battle.



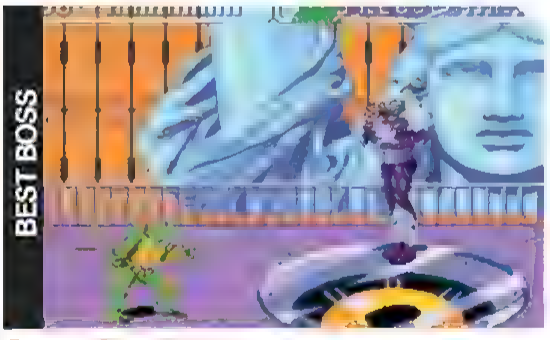
Pizza Bomb

Looking like a precarious fatty-trap, The Pizza Bomb kind of makes this list by default as it's the only power-up – save for the health pizzas, of course – to appear in the entire game. Usually, anything in a videogame with a scribble of a cartoon bomb on the box is best avoided. Not here though. Instead of turning our 'heroes in a half shell' into 'heroes in multiple pieces of green seared flesh', one touch of this potent jalapeno-riddled doughy disc quickly puts the Turtles into a convulsive spinning fit – making them temporarily invulnerable to all enemy attacks, and probably quite dizzy, too.



The Technodrome: Let's Kick Shell

Putting aside the embarrassing (and nonsensical) subheading that Konami bestowed upon this stage, The Technodrome was an exclusive level gifted to the SNES port (probably in a bid to give it a bit more longevity than the original game, we suspect). For that reason the two-part Technodrome stage has to stand out as one of the best levels in the game. As soon as the Turtles find themselves behind enemy lines, the abundance of Foot Soldiers increases heavily. Add to this a swarm of annoying unicycle bots and fussy hand-chewing Mousers, and getting through this stage takes a real test of skill.



Super-Shredder

Konami made a few tweaks to *Turtles In Time* for its SNES port. We've mentioned the addition of the Technodrome stage, but there was also some fan service filtered into the bosses, too. In between the releases of the arcade and SNES versions of the game, the second *Turtles* film was released. In reference, Konami included the film's villains Tokka and Rahzar in the game, and transformed Shredder into Super Shredder – as he appears at the end of the movie. Better than that though, is that rather than building him up only to then witness him fall through a jetty and drown, you actually get a chance to throw a fist at him. Cheers, Konami.

Tossing a Foot Soldier

If we compiled a list of the greatest uses of Mode 7 in a videogame, tossing a Foot Soldier out of the screen would have to be somewhere high up on that list. The first time you did it was probably by chance. If you're anything like us, you won't have read the manual beforehand, and would've jumped straight into the game and smiled like an idiot when that blocky-looking enemy ninja came flying at you. Brilliantly, Konami utilised Foot Soldier throwing in an innovative boss fight with Shredder. It's one of best boss fights in the game and finds our heroes forced to lob enemies towards Shredder, who's bunkered down inside a tank.

What the mags said... ages ago

Mean Machines 80%

"The gameplay did get repetitive after a while but for a quick 'pick up and play' this two-player arcade beat-'em-up shouldn't be missed!"

What we think

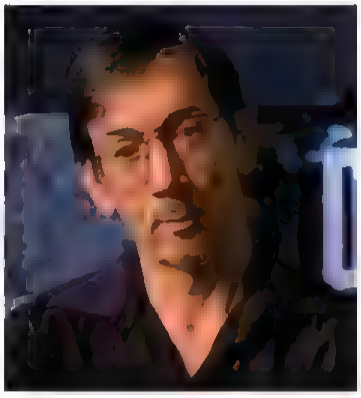
As usual, *Mean Machines* got it pretty much spot-on. The game does grow repetitive, but what side-scrolling fighting game doesn't. Still a SNES classic, though.

IN THE KNOW

PLATFORM: SNES
DEVELOPER: IN-HOUSE
PUBLISHER: KONAMI
RELEASED: 1992
GENRE: SCROLLING FIGHTER
EXPECT TO PAY: £5-10

In the chair with...

WILL WRIGHT



THE SIMPSONS MAY HAVE DUBBED HIM 'THE NERDIEST NERD IN THE ENTIRE COMPUTERVERSE', BUT WILL WRIGHT ISN'T YOUR TYPICAL GEEK – HE LOVES A GOOD FIGHT. IF A GAME CONCEPT DOESN'T FACE SOME KIND OF PANICKY HESITANCE BY A TABLE OF APPREHENSIVE SUITS, A LITTLE PIECE OF THAT IDEA DIES INSIDE HIM. STUART INVITES WILL ROUND FOR A SIM SANDWICH...

Will Wright thinks outside the box. We know it's a hackneyed phrase that's been coined so often you can't even type the words without feeling uninspired, but there is simply no better idiom to exemplify the achievements of this man. The prolific designer changed the way many view games, pulling pixels away from irreverent subjects and plonking them into everyday scenarios. This workman-like approach to game design has earned Wright a place in the prestigious Academy of Interactive Arts and Sciences Hall of Fame, alongside friend and fellow industry great Shigeru Miyamoto. He sees the accolade as a huge honour and a giant step for the industry. His social simulator *The Sims* would also knock the spellbinding PC classic *Myst* off the top spot to be crowned Greatest PC Game Of All Time.

Like all great practitioners, Will was an enthusiast of literature and a gifted obsessive, a guy that would approach interests and hobbies with compulsive furore. Feverously investing the time to understand every microscopic detail there was about the subjects that fascinated him. It's no surprise then, when you consider the archetype game that he's most synonymous with, that the one area that continually sparked his curiosity was construction.

"I spent most of my childhood building models and obsessively researching various subjects that I found interesting, such as 20th Century history, Houdini, insects, airships, astronomy, and explosives. I would usually get very obsessed with some subject or area of interest for six months or a year, and just learn everything about it. I've always liked studying different things. That's one reason why I really like doing game design. It gives me an excuse to go out and research these wildly different things for a year or two and then move onto the next thing later."

After leaving school, having studied architecture and mechanical engineering, Will's pragmatic nature, talents and love for space would stand him in good stead for a career in game development. He discovered a keen interest in robotic engineering, which would prove the catalyst for his eventual career in games when, after purchasing an Apple II home computer to hook up to one of his mechanical creations, Will inevitably discovered a new subject to learn and master: programming.

Raid On Bungeling Bay for C64 was Will's first 'proper' foray into programming. *Raid* was an overhead helicopter blaster that saw gamers dropping bombs over enemy installations. Its look shares a certain semblance with Will's second and most revered game, *SimCity*, the idea for which, incidentally, came to him during *Raid*'s development when he realised he was having more fun designing its levels than playing the finished game.

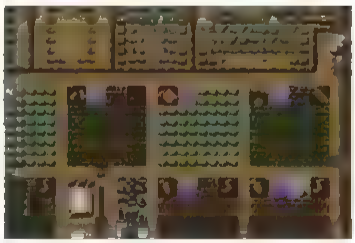
"I was fascinated by bringing a city to life. I wanted to add more behaviour to it. I wanted to add traffic and see the world kind of come alive and be more dynamic. At first I just wanted to do a traffic simulation, but then I realised that traffic didn't make a lot of sense unless you had places where the people drove to... and that led, layer upon layer, to a whole city – *SimCity*," muses Will.

There are areas of *Raid*'s gameplay that show evidence of the *SimCity* ethos. Players would receive intelligence reports and, over the course of the game, the enemy factories open, causing headaches if not obliterated quickly. This idea of sprites growing and developing is a significant aspect in all of Will's videogames.

The legion of *Sims* games that followed would find that their sporadic themes echo their commercial acclaim, but were there any *Sims* titles that fell to the cutting-room floor, perhaps deemed technically impractical? "There were lots, such as *Sim Sewer* and *Sim Storm*, recalls Will. "One thing that I've always wanted to do is a tactical weather simulation, and by tactical I mean really zoomed-in on the intricate nature of a thundercloud, the way tornadoes form, gust fronts, and so on. If you could visualise the whole thing in three dimensions, I think it would be a fascinating game. It's very much an interface challenge though. I actually did some experiments for a while, pursuing this idea. How you would simulate a thunderstorm and how you would visualise the different layers inside it. That's one of those ideas I haven't quite figured out yet."

The Sims wrecking ball was set in motion in 1985, with the release of *SimCity* on C64. The game, originally entitled *Micropolis*, would be a first of its kind, a game that could be neither won nor lost, a 'passive RTS' for want of a better description. It would earn itself the nickname 'software toy' owing to its lack of clear objectives. Giving the player free creative rein over a patch of unsullied land, they had to erect edifices and sustain a thriving and bustling city. *Raid*'s problematic headaches would make a re-appearance in the inspired and potent form of Mother Nature, who would send natural disasters, such as fires and tornadoes, to haphazardly afflict your city.

"I like the fact that the player is put in the creative role and the game really becomes an amplifier on their imagination," Will says. He also took inspiration from short story *The Seventh Sally*, written by Stanislaw Lem,



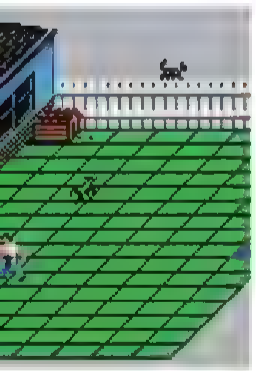
(PC) *Sim Farm* is one of the Will's lesser-known *Sims*, although it looks more 'Sim Allotment' in our opinion.

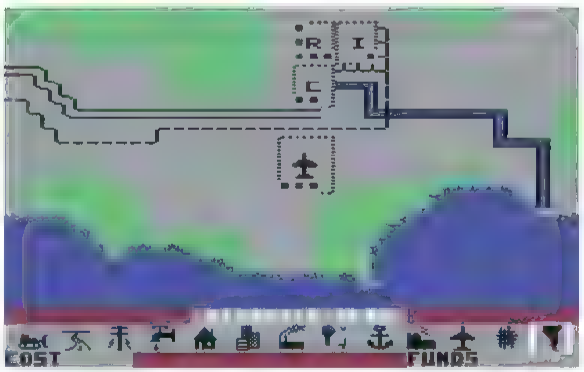
IN THE KNOW

IN BRIEF...

Pulling games away from fictional subjects and supplanting them inside everyday situations, Will's salient programming efforts became renowned for being built around rules and environments. His distinctive vision eventually found a catalyst with the formation of his company Maxis, a partnership with investor Jeff Braun. Under the Maxis banner, Will produced a slew of simulation-type games. In 1997 Maxis was acquired by EA, and it was then that Will produced *The Sims*, his most successful title to date. He left EA in 2009 and formed Stupid Fun Club.

"I WAS FASCINATED BY BRINGING A CITY TO LIFE. I WANTED TO ADD MORE BEHAVIOUR TO IT. I WANTED TO ADD TRAFFIC AND SEE THE WORLD KIND OF COME ALIVE AND BE MORE DYNAMIC" WILL WRIGHT





WILL WRIGHT

FROM RUSSIA WITH LOVE

Will has always had an affinity with outer space. His fascination began as a boy when he had ambitions to become an astronaut. Ironically, none of Will's games, with the exception of *Spore*, have really sought to tackle the subject of space exploration, they merely teeter on its cusp teasingly and never take that plunge into the deep dark unknown. Will still occasionally panders to his early teenage passion for building robots and has even entered some of his creations into the US equivalent of *Robot Wars*. His first entry was a metallic door wedge with a doll's head on it. Nowadays, though, Will is an avid enthusiast of collecting training parts and replicas from the Russian space programme. "It's a hobby that comes right back around to that interest in construction. "I love the way the Soviets have such a totally different philosophy about space engineering compared to NASA. Their stuff was very simple, robust, and highly reliable, contrary to popular opinion. My favourite piece is the main control panel off the Vostok space capsule" declares Will.

Streets Of SimCity allowed you to import your *SimCity 2000* landscapes, take to the streets and battle against other cars.

about an engineer who befriends a deposed tyrant and sets about creating a miniature city with synthetic citizens for him to torment.

Will struggled to convince Brøderbund that *SimCity* could work. The company baulked at the game having no clearly defined win/lose elements, and Will was forced to promote the game himself. But without an affluent backer to finance this huge task, sales proved slow.

In 1987, during a party, Will sits coyly in the corner. Shy, he awkwardly tries to blend into the ambience, but fails miserably. His uncomfortable air catches the attention of Jeff Braun, and the pair begin talking about their interest in games. Jeff about a desire to enter the industry through publishing, and Will about developing a game that he candidly admits no one will touch with a bargepole.

"I think I struggled to find a publisher for *SimCity* because, at the time, most games were very action orientated or turn based. They all had really clear win/loose goal states. The idea of a sandbox game was pretty foreign to everybody," Will admits.

Jeff Braun however recognised its massive potential and persuaded Will to continue championing his creation. This encounter would spark the genesis of Maxis – which is 'six ars' backwards, as it was Will and Jeff's hope that you will be playing their games until 6am – and under this banner, together, the pair would attempt to publish the game on home computers.

When the time came for Will to clear up loose ends with Brøderbund, the company finally gauged a clear output of Will's dynamism and was forced to eat humble pie. Brøderbund signed Maxis a two-game co-distribution deal and, more vitally, saw *SimCity* released across a number of home computers, including a 'proper' C64 release.

Will and Jeff's direction for the *Sims* franchise would travel to juxtaposing worlds. In 1990, Will delivered the ultimate macrocosm with *SimEarth*, and a year later the ultimate microcosm with *SimAnt*. Sadly, despite such a staunch fan base, neither game, solely under the Maxis name, mirrored the success of his original cityscape classic.

SimEarth was an epic beast based on the writings and theories of Dr James Lovelock, who theorised that Earth resembles a superorganism – one made up of smaller organisms that can only exist within a group. The game was arguably one of Will's most adventurous and complicated sims. Players could manipulate the composition of the atmosphere and the rate of reproduction, and even toy with evolution. The game retained the hindering Mother Nature elements of *SimCity*, with natural disasters such as hurricanes, fires, volcanic eruptions and even disease providing hurdles within the game.

This superorganism simulator that Will had created would then be put under a microscope for his peculiar follow-up. Inspired by the writings of biologist Edward O Wilson, *SimAnt* was markedly different from the games before it. It was the first sim to present the player with a clear set of goals. Taking the role of a black ant, the player must drive colonies of hostile red ants, spiders, and eventually humans from their homes. Influence your denizens by using pheromones and attack enemies by overpowering them with swarms of drones.

Between the release of *SimAnt* and EA's eventual acquisition of Maxis, the market saw more sim style games emerge from our side of the pond, as Peter Molyneux and Bullfrog kept the British end up. *Populous* was released the same year as *SimCity* and went on to spawn *Theme Park*, *Theme Hospital*, *Black & White* and even a popular RTS offshoot of the genre in the form of *Syndicate*. With EA having all of these influential titles within its stable, it was inevitable that it would be interested in acquiring Maxis. The publishing rights to both Bullfrog and Maxis meant EA would prove a formidable force in PC gaming. And after a return to form for *SimCity*, with the sublime *SimCity 3000* in 1999, under a new EA banner, Will's ant behaviour model would then provide the catalyst for his most popular and gutsy creation: *The Sims*, an idea that had been rattling around in his head for years.

The initial concept behind *The Sims* was as an architectural design game, originally stemming from an interactive doll house idea dubbed 'Home Tactics'. The concept shifted after it was recommended to Will that players should be scored by the in-game homeowners in relation to their quality of life. Perhaps fuelled by concern that the game's 'doll house' qualities could only appeal to female gamers, trying to convince a blinkered EA to agree to *The Sims* wasn't easy.

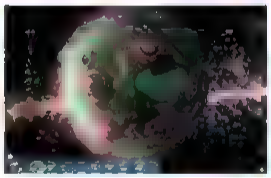
But Will's conviction prevailed and the game proved a runaway success. As expected, the home-making and social clique aspects did prove to be a resounding hit among young female gamers, but it also found a mass appeal across a broader spectrum of gamers of all other ages.

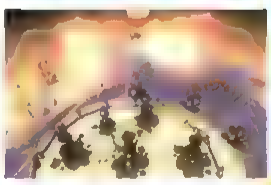
"There are several reasons why *The Sims* was so popular. The subject material was something everybody was intimately familiar with, and secondly, the game was very focused on the stories the players would tell with it, not stories we were trying to force upon the player. In some sense it's just a modern doll house, but in another way it's a

SPORE

SPORE

Legions of PC owners excitedly awaited the release of Will Wright's fascinating next project. *Spore* has been in development since the dawn of the millennium, which indicates how significant this game was. Like all of Will's endeavours, *Spore* is split into a series of evolutional phases, each with their own unique style of play. It sounds like a truly head-spinning spectacle offering gamers a revolutionary metaverse within which to create and converse. Sections of the game borrow elements from *Pac Man*, *Populous*, *SimCity* and even *Destroy All Humans!* for the sandbox sections of the game. Whilst far from perfect, it's remains an entertaining experience.





[PC] Tweaks to *The Sims 2* came in the form of expansion packs and allowed you to give pets to your Sims.

very ripe environment for personal storytelling. When people use it to create stories, they naturally want to connect with other people to share those stories."

Will remembers, avidly, the first review he read about the game. "[It] was actually quite negative. Someone on some little website wrote a scathing review of the game. It was pretty depressing reading that first review, but two days later every other review that came out was raving about the game. That first review kind of rattled me, like, 'Oh my God, they didn't get it'.

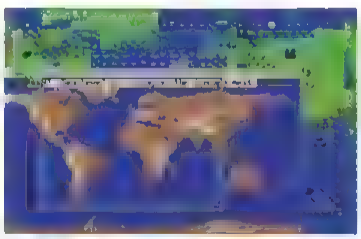
But he need not have worried. Within a year, *The Sims* became his biggest hit, selling over 16 million copies and creating the most successful series of expansion packs ever created. Its sequel, *The Sims 2*, released four years later, can perhaps be seen as an almost faultless refinement of the game, which seems to quash any chance of an immediate sequel due to countless expansions and popular updates of the game. And in that respect perhaps the game can be described as the ultimate 'software toy', a virtual doll's house or an interactive box of Lego bricks for which players can purchase accessories.

Will's last project for EA, *Spore*, was his most ambitious yet. *Spore* has been in development since 2000 and tackled the subject of evolution, bestowing the gamer with God-like powers. Its original working title, *Sim Everything*, speaks volumes about the epic scale of Wright's last game for Electronic Arts. He's just a tad upset he didn't have to fight tooth and nail to get the project off the ground.

"I think the breadth of experiences in *Spore* will be higher than all my other games put together. I think, like *The Sims*, *Spore* is evolving to be even more toy and less hardcore sim. It's designed to be fun just to experiment with it. It was probably an unrealistic design goal in the first place, which is why I'm surprised that we're actually pulling it off. EA has been highly supportive of it every step of the way, which is almost a let down, because with *The Sims* I had to fight so many people to get it out the door, which was kind of exciting."

Will is no longer at Electronic Arts, having left in 2009 to form the entertainment think tank Stupid Fun Club. No games have been announced as of this time.

[Amiga] *SimEarth* was very involved. You had the whole world in your palms, so big hands were definitely in order.



[Amiga] Apparently, *SimEarth* was a massive hit with meteorologists. They enjoyed playing it on their lunch breaks.

SIMPLY THE BEST...

RAID ON BUNGELING BAY

This is where it all began: taking out enemy bases from above. This early Commodore 64 game feels wonderfully smooth to play, with the scrolling screen and convincing helicopter handling. However, it doesn't bode well for a game's self-esteem when its creator favours constructing it over playing it.

SIMCITY

Even those who would rather poke themselves in the eye with a rusty spoon than play a computer game can't dispute its brilliance. Stuart Campbell summed up the game's notoriety best in issue 37 of *Amiga Power* with a brilliant one-line review: "Look. I'm not reviewing *SimCity* again. No way. Forget it." He awarded it 90%.

SIMANT

Ever had a deep-seated desire to be an ant? No, neither have we, but Will Wright's surreal virtual ant farm certainly went some way to stirring our imaginations. It was his first attempt at giving his virtual superorganism a social life. It might not have been much to look at, but let's be honest, neither are ants.

SIMCITY 3000

After a slew of *Sim* spin offs (including *Sim Copter*, *Sim Park* and *Sim Zoo*) and having the plug pulled on its SNES exclusive *Sim Tunes*, under the parental umbrella of Electronic Arts, a more relaxed Maxis set about getting its *Sims* back on track. And it did just that with *SimCity 3000*.

THE SIMS

Is it a game or is it a toy? Perhaps it's just a virtual slice of hallowed pop culture? 20th Century Fox certainly thinks so – it's reputedly turning the *Sims* franchise into a movie. *The Sims* would be the first videogame to allow 11 year olds to sample the world of dog breeding by allowing them to get two avatars to have pixelated intercourse.

"THE BREADTH OF EXPERIENCES IN SPORE WILL BE HIGHER THAN ALL OF MY OTHER GAMES PUT TOGETHER. SPORE IS EVOLVING TO BE EVEN MORE TOY AND LESS HARDCORE SIM"

WILL WRIGHT

DEVELOPER LOOKBACK

IF MICROPROSE WAS A GAME, IT WOULD'VE BEEN ONE OF TWO HALVES. SURGING INTO AN EARLY LEAD, THEN HAVING TO FIGHT OFF A LATE ONSLAUGHT. BUT HALF-TIME WAS INCREDIBLE – NOT SO MUCH A TIME TO REST, BUT A POINT AT WHICH TO EXCEL. DAVID CROOKES EXPLAINS, IN PART TWO OF OUR SERIES

MICROPROSE (Part 2)

Sid Meier, the genius behind some of MicroProse's best games.

Throughout the Eighties, MicroProse had made a name for itself with its highly regarded and commercially successful run of flight simulators. Sid Meier had proved to be something of a dab hand at creating titles such as *Gunship!* and *F-19 Stealth Fighter*, and his MicroProse co-founder Bill Stealey, given his military background, was able to market them effectively.

The company had gone from strength to strength, opening up new frontiers outside of the US with one of the most notable studios being based in Tetbury Gloucestershire. UK titles such as *Stunt Car Racer* and *MicroProse Soccer* cemented the firm's reputation as a software house that traded squarely on quality.

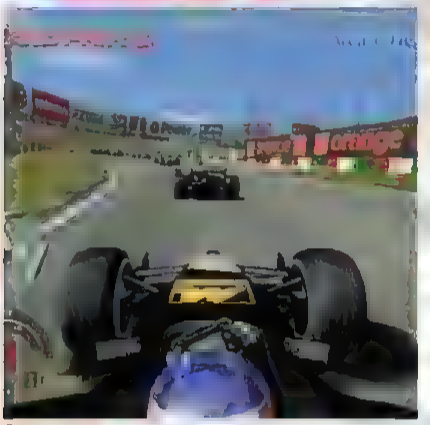
But back in the US, Sid Meier was getting restless. With a desire to dabble in areas other than flight sims, he came up with two killer titles. And while Bill was eager to pull the company in a different direction, the two games took MicroProse to another level, allowing the firm to enter its second era of success.

"I wanted to enter the coin-op arcade market but Sid didn't like it," says Bill. "But I made a decision and we went for it. The first game we made was *F-15 Strike Eagle. The Arcade Game* and we also made a robot fighting game called *B.O.T.S.* But it was tough going into competition with the Japanese, who were dominating the arcade sector. Taking military games and making them work as a coin-op was also costly."

MicroProse sold around 7,000 units of *F-15 Strike Eagle*. It was a huge figure, but it wasn't enough for MicroProse to make enough money from its new venture. The two arcade games weren't attractive enough for punters – their superb 3D graphics failing to compensate for the fact the machines were too different to others on the market at the time.

"It was not a good decision," laments Bill. "It led to a situation where we had to raise

MicroProse's UK art team were a happy bunch. Front row (left to right): Guy Jeffries, Matthew Knott, John Reitze (a miniature), Drew Northcott, Amanda Roberts. Back row (left to right): Andy Cook, Eddie Garnier, Nick Cook (art manager), Greg Shill, Martin Severn, Terry Greer



[PC] *Geoff Crammond's Grand Prix 4* was the final game to carry the MicroProse logo

MicroProse's *Tycoon* series continued with titles such as *RollerCoaster Tycoon*

INSTANT EXPERT

MicroProse had two labels. MicroPlay in America and MicroStyle in the UK. It allowed the company to diversify and yet keep the MicroProse name.

Bill Stealey was close to Spectrum HoloByte's president Gilman Louie. It helped pave the way for Spectrum HoloByte to snap up MicroProse.

After leaving MicroProse Bill went on to found Interactive Magic, another simulation software company.

MicroProse wanted to produce console games for the Nintendo 64 and PlayStation in 1995, but it didn't have sufficient financial resources.

Geoff Crammond's Grand *Prix 4* was the last-ever game to carry the MicroProse name.

The rights to MicroProse games were eventually transferred to Atari, but in the end Sid Meier acquired them for Firaxis, which he co-founded.

Sid likes to refresh his franchises, hence the development and release of *Sid Meier's Railroads!* in October 2006.

When MicroProse fizzled away, it left a major hole in the serious simulation market.

That's the reason why Bill has gone on to form Thriller Publishing along with other ex-MicroProse top brass, in a bid to breathe life into the genre.

As for the MicroProse name it was bought by the Interactive Game Group in 2007. MicroProse Systems, as it's now called, sells consumer electronics, power products and game controllers.

money in order for the company to survive.' Luckily, Sid's new games helped to keep the firm going and by now MicroProse had gone public. The first of the new crop of titles was *Railroad Tycoon*, a business sim in which players built and managed a railway company in America, England or Europe, creating a line within a scheduled time, complete with track, stations, trains and a full timetable. It wasn't long before the game was being heralded as a classic and one of 1990's best, but, more than that, it gave Sid a chance to branch into a fresh area of gaming.

He had the idea of taking simple systems and weaving them together to create a more complex whole. "There was operating the railroad, playing the stock market, building track," explains Sid. "It was like different things that individually are pretty simple and easy to understand and easy to get into, that when they interact, create an interesting kind of complexity."

Sid worked on the game with Bruce Shelley, who had previously worked for board game maker Avalon Hill. Bruce and Sid formed a great team, made all the better for Bruce's love of railroads. He would spend hours discovering facts and giving Sid feedback. And it was through honing the system used in *Railroad Tycoon* – and because a sequel to that game was canned – that Sid was able to embark on what some would say was his landmark title: *Civilization*, published in 1991.

This turn-based strategy game saw players flung back to 4,000 BC, employing a fair deal of micromanagement as they attempted to build a dominant empire. Again, it was a complex welding of simple systems. But more importantly for MicroProse, it won scores of awards, sold bucket loads, and helped to keep the company's financial head above water, for a couple more years at least.

Civilization had special challenges for MicroProse. Sid had sprung *Civilization* on Bill after he had spent considerable time on the product. The testers liked it, and Bill enjoyed the decision making. Being a board game player, he thought it would be a nice addition to MicroProse's title list. But when MicroProse launched the title it did not do well.

"It seems everyone needed Sid to give them a few hints to get going," explains Bill. "So *Civilization* was brought back in-house and the development team decided that they needed to put Sid in the box to give hints on how to get started. That is how the advisors got into the game. The design tried to put 'Sid in the box' to give you tips." *Civilization* was reshipped and from there the game took off.

Civilization was timely for MicroProse. Will Wright had created *SimCity* in 1989, a game much admired by Sid and from which he gathered some of *Civilization*'s design ideas. With *SimCity* having rode high in the charts, Sid was convinced his game would also do well. "The creative spark behind *Civilization* was my love of history," Sid explains. "It's such a robust and fascinating subject."

One small problem, however, was that *Civilization* was really a board game created by Avalon Hill. Bill had no idea of this until the Avalon Hill CEO called and threatened to sue MicroProse, so Bill decided that it should share the spoils and offered to put a coupon in every *Civilization* game to sell a board game from Avalon Hill. Avalon Hill's CEO agreed... although it wasn't the end of the matter when it came to *Civilization* ownership rights.

The approach to making games at MicroProse was very different to the way many developers tackle new projects today. Although *Civilization* came out at a perfect time, it wasn't deliberate. Sid would simply look for a gaming topic, be it a train or a pirate, and create something around it. Experimentation was the most important thing and it was possible because hundreds of thousands of dollars didn't need to be thrown at the games in order to get them to the standards of their peers.

Still, even though *Civilization* was widely regarded by the developers as a smash

THRILLER

Bill Stealey is now set for a return to videogaming following the setting up of Thriller Publishing. He is joined by all of the executives from the early days of MicroProse (with the exception of Sid Meier).

The company will focus exclusively on MMOs, producing military and espionage-themed games in the first-person shooter, action-adventure, strategy and simulation game genres.

While Bill wants Thriller's games to appear on consoles, the core format is set to be the PC.

"We have so much experience of gaming," says Bill. "We were creating games that fit into as little as 64 kilobytes of space. For us, it's about simple, elegant design that can entertain, but harnessing the benefit of technology today."

DEVELOPER LOOKBACK

(PC) *Sid Meier's Railroads!* was released in 2006. You can never shunt a good game off the tracks, it seems

hit game, the management was not so sure. The firm held back on the game and pumped little cash into its marketing. Promotion was via word of mouth but it soon took off and not only was the management surprised but Sid was, too. He knew it would sell but he didn't think it would start being spoken of as one of the best PC games ever made.

At the same time, MicroProse's UK division had released Geoff Crammond's *Formula One Grand Prix* on the Amiga and Atari ST, with a PC version following. Gamers adored this racing simulation, loving the attention to detail, the 'real world' physics and the accurately modelled tracks. The only downside to the game was the significant slowdown when the screen became too busy but it didn't stop shoppers racing away with it.

MicroProse went public on the American NASDAQ market in October 1991. MicroProse raised a lot of money, paid off all its old debt, and embarked on an ambitious expansion plan. The company also got an outside board of directors who pushed MicroProse into developing a plan to really grow the firm. Plans were made to double the size of MicroProse within three years.

"But the problem is, you can spend the development money but you may not come up with the right products to make a real hit or a significant profit," says Bill. "MicroProse had to find a way to break out of just military games and the occasional one-off brilliance of Sid and his various project ideas, to reach the kinds of growth the board wanted."

Being public also meant MicroProse had to announce earnings every 90 days, which put significant pressure on everyone in the company and sometimes lessened the ability to spend time on creativity. And yet MicroProse didn't take its eye off military flight sims. Indeed, in 1992, it acquired Leeds-based flight sim developer Vektor Grafix, who created the MicroProse released flight sim *B-17 Flying Fortress*.

The firm was proving to be the place to be for creative programmers and artists and Bill was beginning to build a gaming empire. But it was starting to move too fast and doing too much, too soon. There were signs of spiritual and financial decay at MicroProse.

In 1992, MicroProse spent a fortune creating an adventure game engine. One game was released using the new system and MicroProse also tried to do a more classic RPG game with *Darklands*. Yet neither really paid for the development of the two systems. It was another costly mistake and one that led, a year later, to Bill putting the company up for sale.

"Being a public company made a big difference to the way we worked," says Bill. "It was a good decision and it had put the firm back on track but we didn't always get on with the board members and we also had to define a game's release schedule, produce quarterly results and so on. And in 1992 we had issues – there we were with 500 employees and too few games. I'm a firm capitalist and I believe incentives have to be aligned with accomplishment. When we began, we had a process that said we'd double or triple pay cheques if the workers met targets but it was hard to do that as a public firm."

In 1992, MicroProse hired a president for the US side of the business and had a managing director for the European side. Bill moved to be chairman of the board and actually spent little time at the

THE MYSTERY GAME

MICROPROSE®

There was a famous story that spread around videogame development in the mid-Nineties. Legend has it that a certain, inexperienced but high-ranking financial manager at MicroProse was wandering around the corridors one day when he caught sight of something new and fascinating on a developer's monitor. The screen showed an array of multicoloured squares appearing and disappearing in hypnotic, organic patterns. The executive walked up behind the developer and stood, bewitched by the fascinating site on the screen.

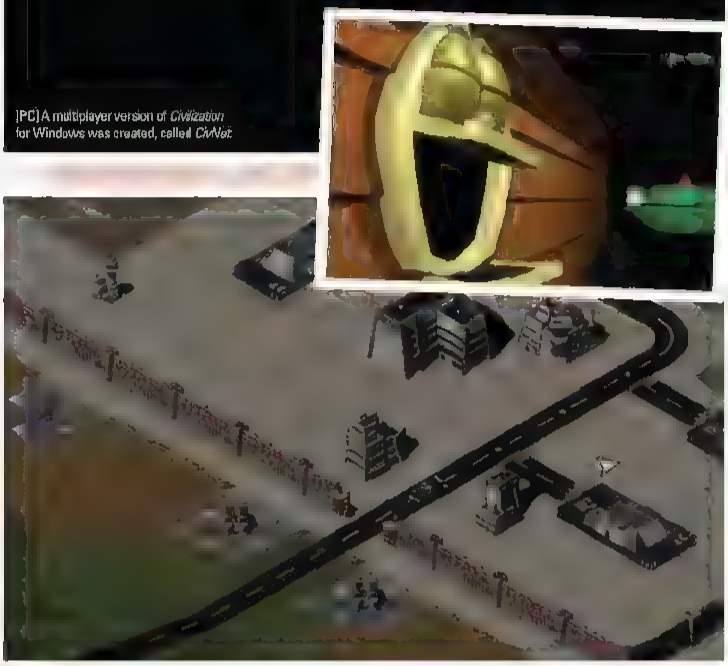
Andy Cook picks up the story: "After some time, and not able to contain himself any longer, he asked the developer, 'That looks absolutely amazing. What game is it?'

"The developer, who was engrossed in a design document at the time, looked up, confused. 'Huh? What game?' he asked.

"The executive pointed to the screen of moving, coloured blobs. 'That. What game are you working on? It looks fantastic?'

"The developer looked at his screen, turned to the suit and said 'That's not a game. I'm defragmenting my hard drive.'"

[PC] A multiplayer version of *Civilization* for Windows was created, called *CivNet*.



[PC] More third-party developers were brought on board towards the end of MicroProse's life. FASA Studio created *MechCommander*.

company during 1992 at the request of the board, to give the other executives some room to manoeuvre.

When Bill returned in September 1992, he found the plans he had left in April – for ten releases in the autumn of 1992 – were all late. The new management had changed the incentive plan to overtime over bonuses. Everyone wanted the overtime and had no real bonuses awarded for completing projects. In 1992, the company only released *F-15 Strike Eagle III* in December. Bill says it was hard to fund a big company on one significant release.

Bill, after firing MicroProse's US president, went out to find financing for the company. He found it from GE Capital in April 1993. But the funding fell through at the last minute due to some inventory accounting errors that scared GE away. Bill was very concerned as the cash was growing smaller by the payroll. Something had to be done and a buyer was sought. At the time three groups wanted control of MicroProse – one of which was Spectrum HoloByte, funded by Kleiner Perkins, a famous venture capital company on the American West Coast. Bill had kept Spectrum HoloByte alive in 1991 when Robert Maxwell, who owned Spectrum, fell off his boat and left the firm without any money. He had sent HoloByte boss Gilman Louie $400,000 following a phone conversation, in a deal that promised MicroProse could ship *Falcon 3.0* in Europe in 1992. So, because of the relationship the two men had built up, Bill chose Spectrum and he left the company after signing over the papers on 21 June 1993.

Spectrum was then in charge of MicroProse and it decided cuts were needed in order to stay afloat. Two offices in the north of England were closed and more than 40 head office staff were made redundant. Bill went on to found Interactive Magic, a company which, like MicroProse, specialised in simulation software.

Sid Meier continued to work for MicroProse and the company began to pick itself up. *UFO: Enemy Unknown* was released on 31 December 1993 and it was so well received it was once named the best PC game ever made. Licences also came thick and fast – *Magic: The Gathering*, *Top Gun* and *Star Trek: The Next Generation* – with Sid also creating the brilliant *Colonization* in 1994.

"The UK arm was still going well, too," says former MicroProse artist Andy Cook. "When I was interviewed for a job there, I was asked which artists had most influenced me and I replied, 'Rembrandt, Vermeer and Tony Hart.' The only thing would change about that answer now, is probably the order."

Although MicroProse in America was losing money, the UK arm was making a profit. For the majority of the Nineties, MicroProse UK was housed in a two storey 'L' shaped building situated next to a quarry in Chipping Sodbury. One 'arm' of the 'L' housed the developers, while the other arm was taken up with various other departments such as marketing, finance, QA and so on.

"At the extreme end of the development arm was the art room," says Andy. "All the artists were housed here and it was a fantastic place to work. Music blared out and the lights were kept at the favoured dim levels – the last thing an artist wants are light reflections obscuring his work on screen. Artists would wander around the room when they were rendering something and see what everyone else was working on. The room had a great atmosphere with opinions being sought and given, tips freely

SIX OF THE BEST

Railroad Tycoon

Complex and challenging, *Railroad Tycoon* is one of Sid Meier's best games. Giving you the option of building tracks in America and Europe, there's even a chance to go back to 19th Century England to create a pre-British Rail line free of leaves and signal faults. It gets progressively tougher but there's loads to keep gamers occupied, battling against and disrupting rivals.

Civilization

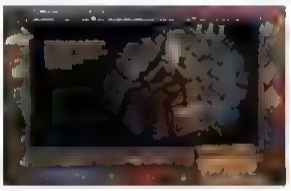
Civilization is a wonderfully implemented, huge, turn-based strategy game that throws you back to 4,000 BC and asks you to create an empire that can survive through to the modern day and beyond, tackling war, embracing new technologies and engaging in diplomacy. A videogame version of *Civilization* had been tried twice before but failed to be released. Sid triumphed in every way with *Civilization*.

Colonization

Take *Railroad Tycoon* and fuse it with *Civilization* and you get *Colonization*. And while you could accuse Sid of cashing in on his two greatest successes, there's a lot to be said for the ambition of this title. The aim was to build an empire by taking over rivals. It was hard to play in bite-sized chunks as it was a textured game of great depth and incredibly immersive, too.

Formula One Grand Prix

This is one of the best racing games ever made. Many people gave this a spin on the Amiga and it was a standout title for motorsport fans. Then again, when you consider that Geoff Crammond was behind it, it comes as little surprise. Care was taken to get the handling and physics just right. As a nice touch you could modify team and driver names for authenticity.



Magic: The Gathering

Based on the card game, *Magic: The Gathering* was by no means simple. Get the strategies and tactics under your belt and it became an engrossing experience. It was good in single-player, tournament, multiplayer or duel. It's also worth pointing out that it was Sid Meier's last ever game for MicroProse. Following the end of this project he founded Firaxis Games.

X-COM: UFO Defense

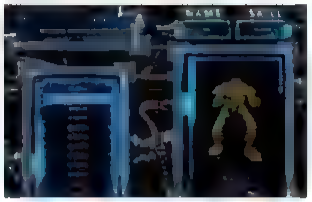
X-COM: UFO Defense is a key player in strategy game evolution. As commander of a group aimed at heading off an alien invasion, you had to manage your resources and do battle against enemy ships, all the while gaining greater intelligence about the enemy. The word 'immersive' is often used in gaming, with *X-COM*, though, it almost defined it.

DEVELOPER LOOKBACK

FOUR TO MISS

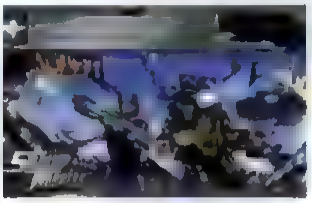
Falcon 4.0

Five years in development and still *Falcon 4.0* was a disappointment. Sadly flawed despite showing signs of brilliance and with some unforgivable bugs that half a decade of care and attention should have ironed out, it was full of detail (a 600-page manual, no less). But the sheer promise of something great just didn't materialise and it was a case of waiting for patches in order to bring it up to scratch. In fact, it was so bugged that the team worked on fixing them for months afterwards.



X-COM: Enforcer

More than 30 levels. Action that is thick and fast. A game that drew on the influence of *X-COM: UFO Defense*. So, a game that must have been a tip-top tactical combat title then? Alas, no. Take the suspense out of *X-COM* and this is what you're left with: it's a game that bears very little resemblance to the 1993 classic – too easy, too simple and too fiddly at times. Being able to carry one weapon at a time is a real bind. It's one to avoid, for sure.



Starship Troopers: Terran Ascendancy

Funnily enough, MicroProse's poorer games came towards the end of the company's life span. *Starship Troopers* was one of the worst – a 3D strategy game lacking in variation and any way of making complex moves in a bid to annihilate the arachnid enemy. Camera problems make the gameplay a tad more difficult and, while there are fun elements to the title (the maps are cool), the visuals are often rough and the campaign too narrow for it to be worth dragging out.

Squad Leader

Squad Leader – in which you led British, German or US soldiers through a variety of missions – shares a name with a tabletop wargame by Avalon Hill, but other than that the two are very different. Set during World War II, this turn-based game is neither complex nor modern – even back then it seemed rather dated. Using a square movement grid. One to avoid? You betcha. The standard of the latter-day MicroProse games really did sour the memory of a once-great developer.

Andy Cook explains: "One of the artists, Justin Horton, was away for a few days. Someone picked something off the floor nearby and parked it on his desk just to get it out of the way. As time went on, all the artists would add a bit here and there until it looked like this."

offered and it was an extremely happy and creative place to work. The lunchtime and after work *Doom* and *Quake* sessions were raucous and enjoyable occasions."

He said the mood changed following the change of ownership, when some of the management team failed to see MicroProse as the creative and productive place it was. He says the happy atmosphere was seen as a playground attitude.

The fun times were starting to come to an end and, in 1996, a decision was made to cut more MicroProse staff. This led to the departure of Sid Meier and Jeff Bridges, who formed Firaxis Games, although *Civilization II* in 1996 was released by MicroProse. The Spectrum HoloByte brand was dropped, however, and all of the company's games were subsequently released under the MicroProse banner. But in the UK, the cuts were drastic and many staff walked out. Psygnosis had specifically opened an office in Stroud and the artists, programmers and designers went there.

"Over time, as staff numbers shrank and layout changes were forced on the developers, the management eventually moved all developers into one, large, brightly lit room," says Andy. "The theory behind this was supposedly to increase communication between artists and programmers, though I, for one, didn't experience any increase in communication between the two groups – it had always been just fine. I did see an unmistakable reduction in the creative atmosphere of the art room, though."

A year later and MicroProse's future was again in the balance. GT Interactive agreed to snap up the firm for $250 million but the deal fell through, having a devastating effect on MicroProse's share price. Worse was to come when MicroProse was sued over the *Civilization* brand by Avalon Hill and Activision. MicroProse had licensed the *Civilization* title from Avalon Hill, who'd helped to delay the legal wrangling up until this point. Interestingly, MicroProse used a cunning way to get around this, snapping up the company that originally designed and manufactured the *Civilization* board game – Hartland Trefoil – and suing Avalon Hill and Activision for trademark infringement and unfair business practices, as a result of Activision's decision to develop and publish *Civilization* computer games.

The whole issue was resolved in July 1998. Hasbro – who had formed its own interactive division three years earlier – was looking to acquire MicroProse and Avalon Hill. A deal was struck which gave MicroProse the rights to the name and handed Activision a licence to publish *Civilization*. *Call To Power* MicroProse's office in Austin, Texas was then closed and, on 14 September, Hasbro announced that it had bought 91 per cent of MicroProse's shares in a deal worth $70 million.

"The funny thing is, we almost bought Avalon Hill," says Bill. "There was an issue surrounding *Civilization* and we had to put a card in the game's box advertising Avalon Hill's board game. It's fair to say Sid took inspiration for both *Civilization* and *Railroad Tycoon* from Avalon Hill."

It marked a new era for Hasbro, who had been working almost exclusively with outside development teams since its inception. Hasbro also bought Atari, which gave it the rights to *Centipede*, *Asteroids*, and *Missile Command*. By buying MicroProse, Hasbro had a quick and easy entry into the strategy game PC market.

With Hasbro in control of a wealth of franchises, a master plan emerged. The PC market was sidelined as the money men started to see the cash to be made by porting MicroProse games to console. Tom Dusenberry, president of Hasbro Interactive said at the time: "We look forward to taking these great games to new platforms, including the Sony PlayStation, Nintendo 64, Sega Dreamcast and more."

MICROPROSE TIMELINE 1990-2002

1990 RAILROAD TYCOON, SILENT SERVICE, RED STORM RISING AND CIVILIZATION ARE RELEASED IN A STONKING YEAR FOR MICROPROSE

1991 MICROPROSE GOLF AND F-15 STRIKE EAGLE II ARE LAUNCHED

1992 MICROPROSE ACQUIRES LEEDS-BASED FLIGHT SIM DEVELOPER VEKTOR GRAFIX. MICROPROSE FORMULA ONE GRAND PRIX REVS ITS ENGINE AND B-17 FLYING FORTRESS SALES GO SKY HIGH

1993 MICROPROSE IS ACQUIRED BY SPECTRUM HOLOBYTE. BULLETSTEALEY DEPARTS MICROPROSE AND SPECTRUM HOLOBYTE AGREES TO BUY OUT HIS SHARES

1994 X-COM: UFO DEFENSE IS RELEASED

1995 COLONIZATION BECOMES ANOTHER SID MEIER CLASSIC

1996 X-COM 2: TERROR FROM THE DEEP COMES OUT FOR PLAYSTATION. SPECTRUM HOLOBYTE BUYS MASTER OF ORION AND MASTER OF MAGIC DEVELOPER SIMTEX. CUTS MADE TO MICROPROSE STAFF

1997 MAGIC: THE GATHERING, SPELLS OF THE ANCIENTS LAUNCHES. GT INTERACTIVE ANNOUNCES AN AGREEMENT TO ACQUIRE MICROPROSE FOR $260 MILLION IN STOCK. DEAL LATER COLLAPSES. MICROPROSE SUED BY AVALON HILL

1998 RELEASES FOR WORMS 2 AND M1 TANK PLATOON II. MICROPROSE SETTLED LAWSUITS FILED AGAINST IT BY AVALON HILL AND ACTIVISION. AUSTIN, TEXAS STUDIO CLOSED DOWN. COMPANY PREPARED FOR SALE

1999 HASBRO INTERACTIVE CLOSES DOWN EX-MICROPROSE STUDIOS IN ALAMEDA, CALIFORNIA AND CHAPEL HILL, NORTH CAROLINA

2001 FINAL AMERICAN MICROPROSE GAME, EUROPEAN AIR WAR, CARRIES INFOGRAMES LOGO

2002 MICROPROSE STUDIO IN CHIPPING SODBURY, UK, CLOSES. GRAND PRIX 4 BECOMES LAST-EVER MICROPROSE GAME

Bill Stealey in his Air Force get-up.

FLIGHTS OF FANCY

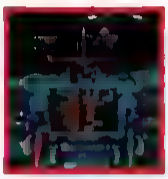
Gunship 2000
Arguably the best of MicroProse's flight sims, the addictive *Gunship 2000* lets you pursue a career as chopper pilot in the US Army. Putting aside the poor intro, the game itself soon hooks you in and you find yourself soaring among the trees, watching the rivers flow and the land below melt away.

B-17 Flying Fortress
There's no doubting the brilliance of *B-17* as you take to the glorious skies in your Boeing B-17 bomber in World War I. Primitive though the graphics may be in comparison to the PC games of today, the complex simulation (the manual is more than 200 pages long) still makes it great today.

Command HQ
It's another quest for world domination with this RTS game that not only sold well, but wowed with its cool graphics and ace AI. As one of the first multiplayer wargames and with the two World Wars and Cold War to work with, *Command HQ* was a triumph for designer Dan Bunten.

Sid Meier's Covert Action
Play as a US government agent eliminating terrorist groups and other baddies in this masterful game. It's all about trying to avoid exposing yourself, working in the background, spying on the enemy, working out the hidden messages in notes and listening in on other people's conversations.

Global Conquest
As an externally developed MicroProse game, *Global Conquest* was released on the MicroPlay label – with the likes of *Command HQ* and *Xenophobe*. Developed by Dan Bunten this second and last for MicroProse) it nailed military strategy and could be played by up to four gamers.



Subwar 2050
Subwar 2050 is a 3D submarine simulator and one with sheer depth, too. Packed with innovation and with options to fine-tune the abundance of options, *Subwar 2050* was a breath of fresh air in the early-Nineties and it doesn't appear to have lost any of its magic today.

Despite the upbeat mood of Tom Dusenberry, the late-Nineties was a time of worry for MicroProse's staff, spread around America and England. It was not helped by the fact that bug-riddled flight sim *Falcon 4.0* was so poorly received by consumers. As it turned out those worries had some foundation. Hasbro closed the MicroProse studios in Alameda, California and Chapel Hill, North Carolina, in December 1999.

A two-year period of relative stability followed and there was hope after Infogrames bought Hasbro Interactive for $100 million. As with many takeovers by the French publishing giant, the MicroProse name was dropped and all games were released under the Infogrames name.

The MicroProse name continued in the UK for a while longer. *Grand Prix 4* was released on 9 October 2002, and it was the last Formula 1 racing simulator released by Crammond and the MicroProse label. The UK studio, however, had been closed a month earlier.

"It was a real shame," says programmer Mark Reis. "I was at MicroProse's UK headquarters for a short period in a snowy late October. The people were all great. My understanding is they had a different way of doing things that worked well and that as long as there was profit, Bill was happy. There were some gems coming from England – *World Circuit* really pushed the technology, the Chris Sawyer games were great and they took Sid's *Tycoon* series to the next level. I'm sorry events came up in the US that required a premature departure."

The MicroProse chapter came to an end in November 2003 when Infogrames – by now renamed Atari – closed the Hunt Valley studio in Maryland. This was MicroProse's original location and it marked the end of a highly successful brand.

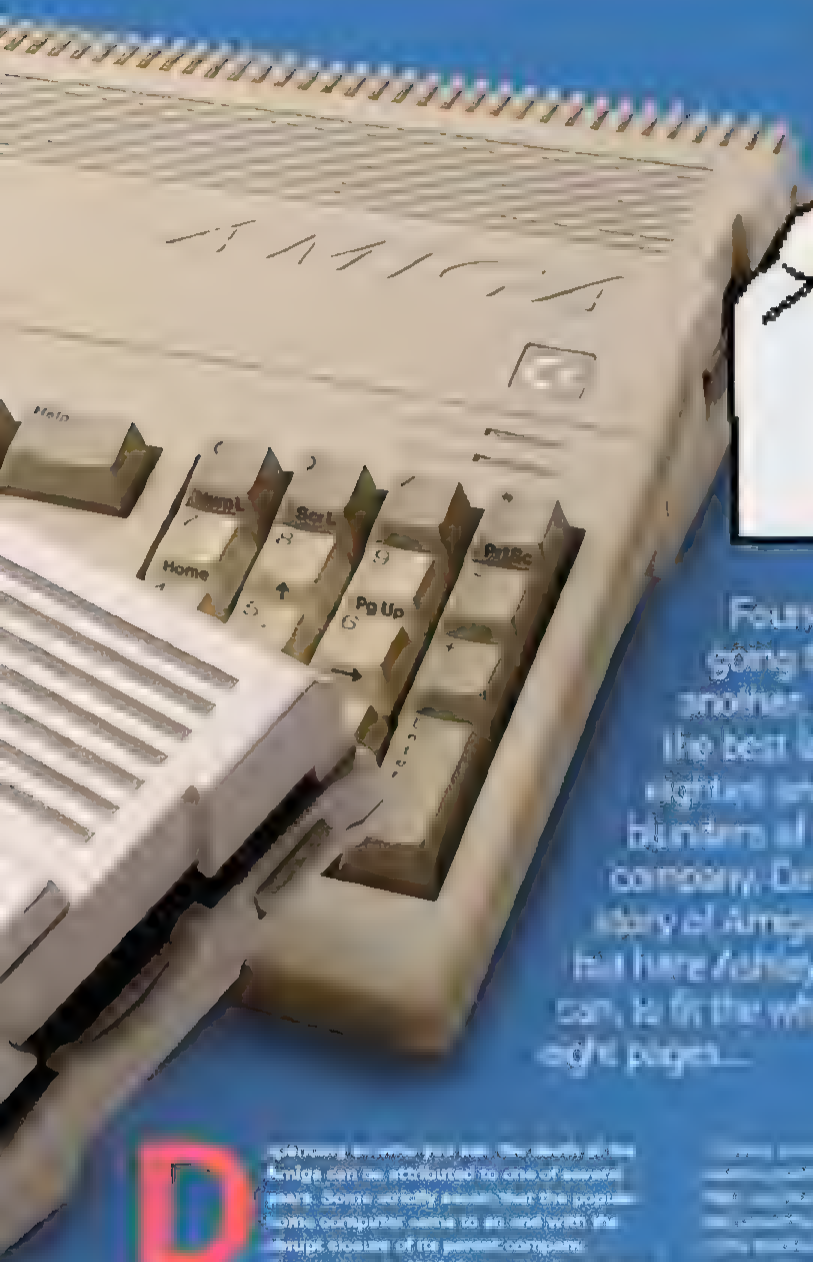
And yet the story doesn't stop there. Firaxis continues to this day and Interactive Magic is now iEntertainment Network. Bill has launched Thriller Publishing with the aim of creating a new raft of simulation games. MicroProse was the seed which allowed videogaming to flourish in Hunt Valley, Maryland and it was behind the careers of so many of the most established names in gaming today. For all its troubles, its successes will be celebrated forever.

(PC) One of MicroProse's forays into adventure gaming, *BloodNet* aped Sierra's *Quest* titles.

(PC) *David Leadbetter's Golf* was a departure from the usual sims, but it worked extremely well and was finely detailed.

AMIGA

AMIGA SPECIAL



Founded in 1982 and still going today, to one way or another, Amiga created some of the best loved computers of the eighties and nineties, despite the blunders of its most famous parent company, Commodore. The complete story of Amiga could fill several books, but here Ashley Day tries, as best he can, to fit the whole 27-year saga into just eight pages...

Dependent [illegible] Amiga can be attributed to one of several years. Some strictly assert that the popular home computer came to an end with the abrupt closure of its parent company, Commodore, in 1994. Some cite the closure of the last commercial Amiga magazine, *Amiga Format*, in 2008 as the truest sign of the computer's demise. A select group of faithful fans, meanwhile, simply cannot let go and would remind you that the Amiga brand itself is very much alive and well and that a new line of hardware will emerge when the time is right. Indeed, it's almost impossible to definitively say where the story of the Amiga [illegible] definitely [illegible] to where it began.

[illegible]

[illegible]

VARIATIONS

> The 2600 games were completed in 1983, just in time for the videogames crash

of the many setbacks that would eventually come to define the [illegible] way, Morse asked Kaplan if he would approach Atari founder Nolan Bushnell about becoming chairman of the board. Upon the meeting, Bushnell instead convinced Kaplan to leave, saying that the two would make more money if they started their own project. Sadly Bushnell soon lost interest and a jobless Kaplan was forced to go back to Atari and ask for work, while Miner was left wondering what to do about Hi-Toro.

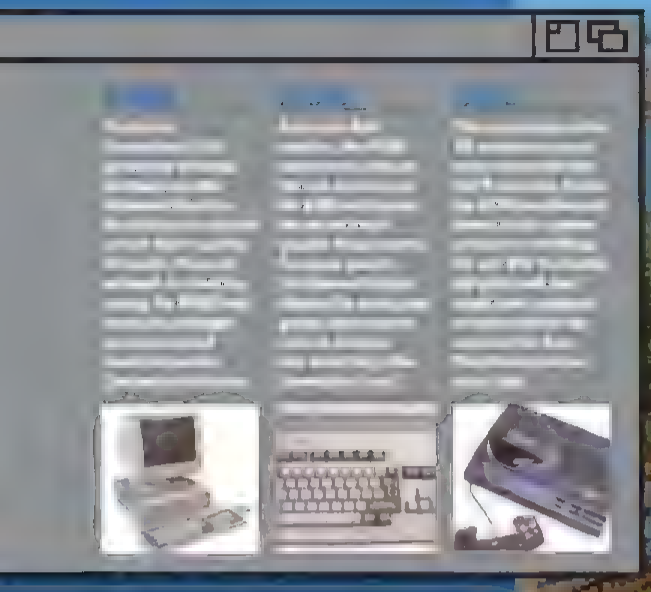
Moving into Kaplan's position of Chief Engineer, Miner found himself at the helm of Hi-Toro and took the opportunity to push it in his own favoured direction. Where once his bosses at Atari had denied him the opportunity to use the 68000 processor, he now had the freedom to build it into his new machine, which he wanted to be a fully-fledged personal computer. Hi-Toro's investors disagreed however, and insisted that the new machine remain a games console. Miner went along with their plan but surreptitiously built expansion ports into the console so that it could be modified into a computer at a later date.

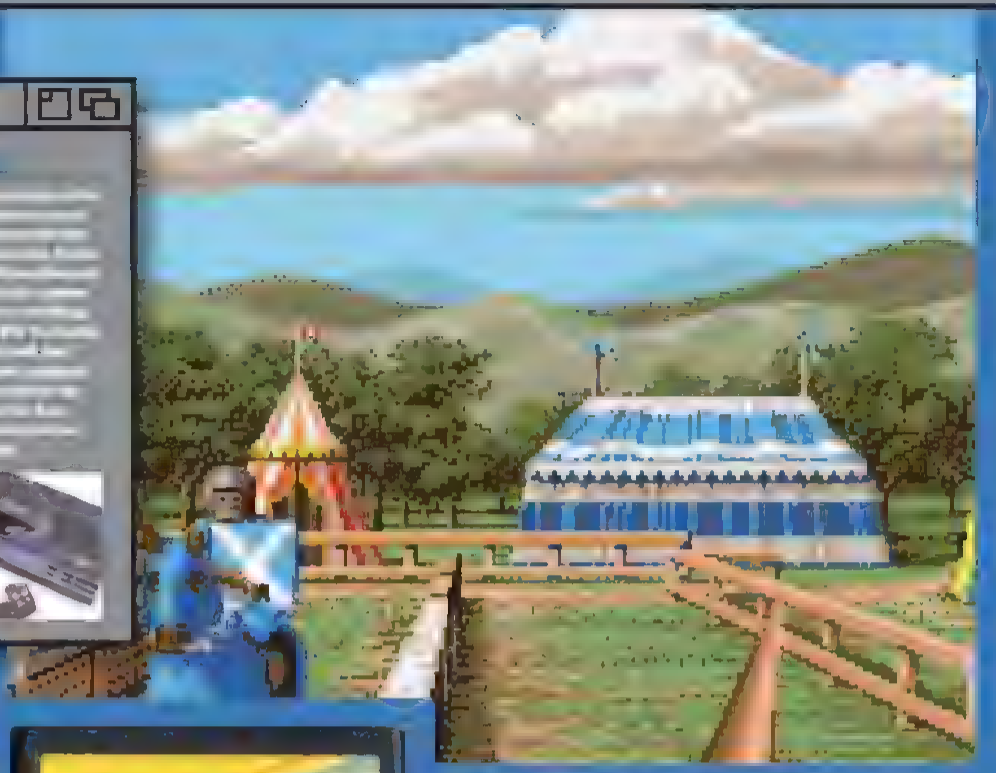
In order to keep the company ticking over while working on its ambitious new console, a part of Hi-Toro split off into a subdivision to work on Atari 2600 games that could be released quickly for a fast and reliable source of income. Under the trading name of Amiga, used because Toro belonged to a Japanese gardening technologies firm, the company produced three games for the 2600 as well as a controller called the Joyboard, which was used by standing on it and leaning from side to side. The 2600 games were completed in 1983, just in time for the videogames crash to sweep the Atari market from under Amiga's feet. Very few of its games ever made it to the shelves, which dealt a severe blow to the company's finances but, ironically enough, it came as welcome news to Miner. With the American console market now considered dead by the industry and retailers alike, it would have been suicide to develop a new games machine – especially one as expensive as a 68000-based model would have been.

With Amiga and its investors finally singing from the same hymn sheet, Miner forged on with his computer prototype now code-named Lorraine, and the initial test model was [illegible] of a monster. But to those who understood computing, she was a thing of beauty. Not only did the computer feature the super-fast 68000, but it also used three custom chips – dubbed Agnus, Denise and Paula – that would regulate and control different functions of the machine, cleverly taking a lot of strain away from the processor and RAM.

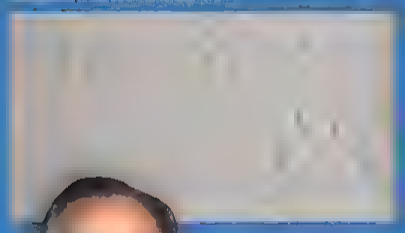
The way in which modern computers use graphics cards, sound cards and all number of dedicated processors is somewhat similar to what Amiga was doing for the first time in 1983, so it was clear that Miner's vision was an innovative one. And these innovations were not limited to just hardware either. As a personal computer, rather than a games console, Lorraine would need an operating system – and it found one with Intuition, a clever little user interface designed by ex-Williams arcade engineer, RJ Mical.

Later known as Workbench, Intuition was one of the first Graphical User interfaces ever released for commercial purposes, following the 1984 release of Macintosh's Desktop, in just under a year. Astonishingly simple to use, Workbench took commands that would previously have been made in text prompts and translated them in to visual signs that anyone could understand. With files and programs stored in drawers that opened and closed when you clicked on them, and a





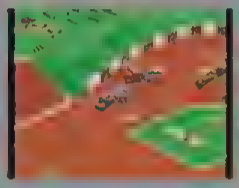
Mogul
Maniac



THE GAMES

Best... Platformer

Best... Shoot-em-up



Best... Racer

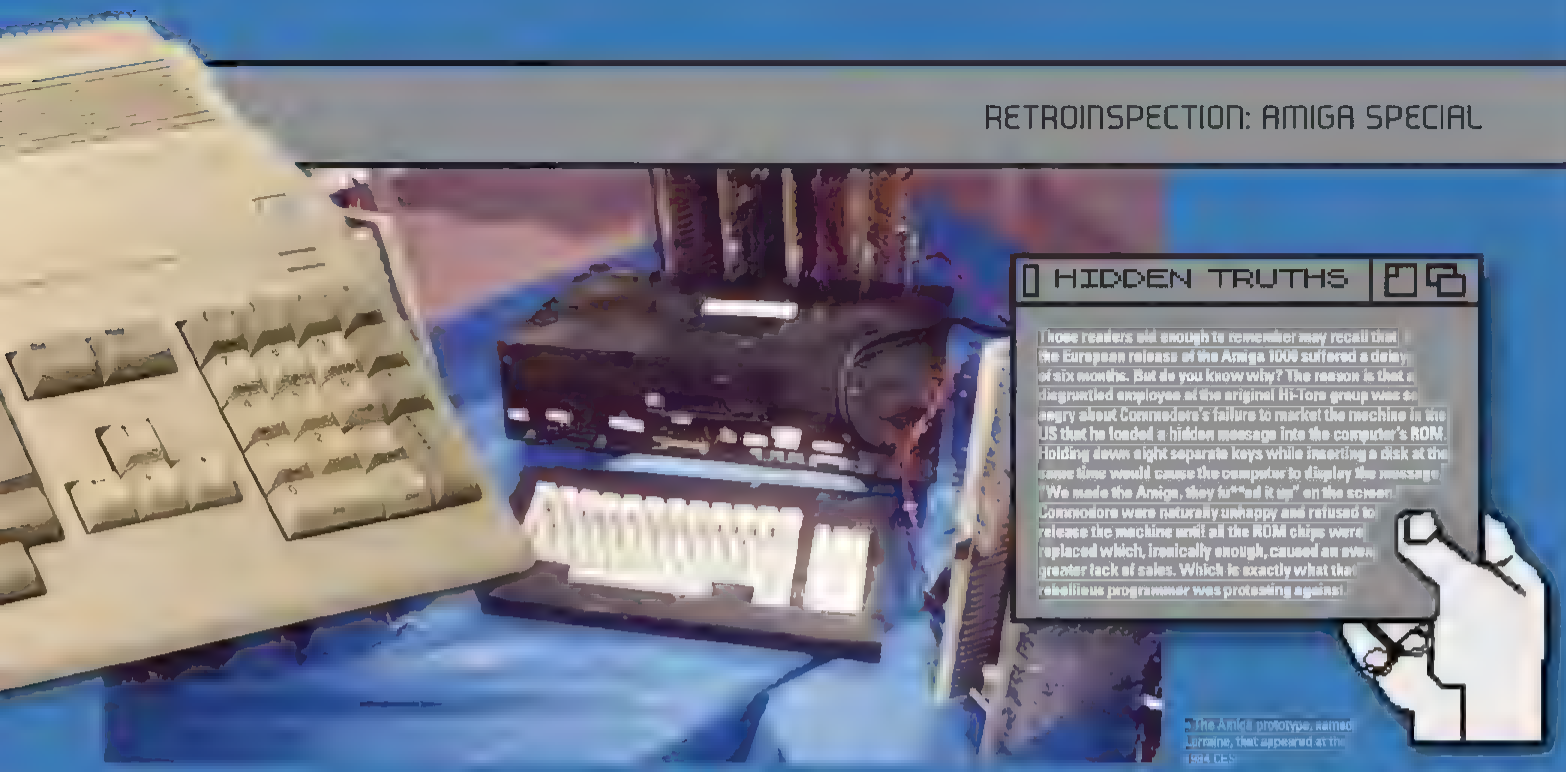
Best... Arcade Action

Best... Adventure

Best... RPG

Best... Puzzler

Best... Sports



HIDDEN TRUTHS

Those readers old enough to remember may recall that the European release of the Amiga 1000 suffered a delay of six months. But do you know why? The reason is that a disgruntled employee of the original Hi-Toro group was so angry about Commodore's failure to market the machine in the US that he loaded a hidden message into the computer's ROM. Holding down eight separate keys while inserting a disk at the same time would cause the computer to display the message "We made the Amiga, they fu**ed it up" on the screen. Commodore were naturally unhappy and refused to release the machine until all the ROM chips were replaced which, ironically enough, caused an even greater lack of sales. Which is exactly what the rebellious programmer was protesting against.

The Amiga prototype, named Lorraine, that appeared at the 1984 CES.

The strategy worked. Amiga 500 was a great computer and a popular one with consumers. Commodore couldn't take the whole credit, however. Much of the Amiga's emerging popularity could be attributed to unexpected support from Electronic Arts. Then led by Trip Hawkins, EA had pledged to develop the best possible games for Amiga, just as it had with C64. But it was EA's first release, actually a piece of software rather than a game, that proved to be the most important. That software was Deluxe Paint, an extremely innovative and user-friendly digital paint/animation package that was widely adopted by other games developers and became instrumental in creating amazing-looking games for the 16-bit computer. Some of the best UK developers around, big names like Sensible Software, Bullfrog and The Bitmap Brothers, all moved onto Amiga in 1987 and began churning out incredible new games that would make the A500 the must-have system of its time. Martyn Brown, who founded Amiga specialists Team17 in 1990, outlines why the computer was so attractive to developers: "The Amiga offered a tremendous level-playing field to the casual/small developer", he explains. "There were no license fees, no dev-kit, no enormous resources required. Because of this, people were able to develop what they wanted and how they wanted, leading to a lot of creativity but with far better results than in the previous generation."

The year of 1987 was indeed a defining year for the Amiga, but it was also the year in which the first act of the company's story truly came to a close. Seeking more control over the company, Commodore chose to close down Amiga's offices in Los Gatos and move all of the staff to their own HQ in West Chester, Pennsylvania. Many of Amiga's biggest names declined to move and chose to separate from the company they had helped nurture. RJ Mical was one of the first to go, choosing instead to become an independent Amiga software contractor. Jay Miner left too, though he did maintain a role as a Commodore consultant for the remainder of the company's existence. From here on out the Amiga's fate was wholly in the hands of Commodore. For better or worse.

One of Commodore's better decisions was to operate the Amiga business on two tiers. Each hardware iteration would be produced in both affordable home and expensive professional variations. This began with the dual release of the Amiga 500 and the Amiga 2000, and was a great way to maximise the sales of one single technological standard by appealing to two very different markets at once. Its other major advantage, perhaps through tradition rather than considered intention, however, was to keep the Amiga as an 'open' platform. This meant that any developer could create, produce and sell software for the machine without having to gain a licence from Commodore and without having to buy into a proprietary media. This proved extremely useful to games developers at the time, especially as competing games machines like the NES and Mega Drive required both a licence and expensive cartridges from the platform holder. Self-publishing was simply out of the question on consoles, but on Amiga it was a gloriously attainable reality.

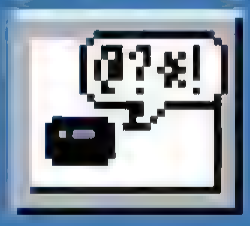
> "Amiga offered a tremendous level-playing field to the casual developer"
>
> MARTYN BROWN, FOUNDER OF TEAM17

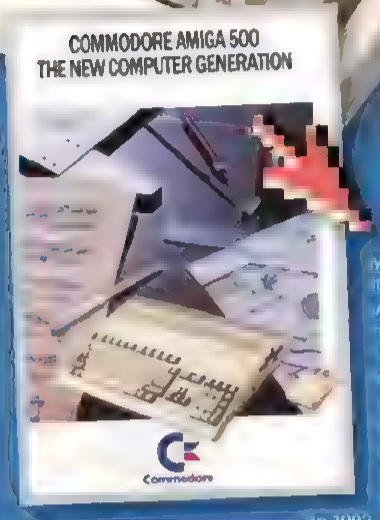
The ease with which developers could produce games for the Amiga meant that it soon amassed a gigantic catalogue of software that could thrive on the market, regardless of Commodore's actions. Which was probably for the best really, as the company soon began a decision making process that would eventually lead to its own downfall. Though the twin guns of Amiga models 500 and 2000 had proved popular, there was one voice of dissent and, ironically enough, this voice came from Jay Miner, who advised A1000 owners not to upgrade. He believed that the 2000 didn't represent a significant enough improvement on the 1000 and was embarrassingly out of step with general computing standards by the time of its delayed release.

Amiga's ability to move with the times continued to diminish over the years, despite the best of intentions. The A500 had admittedly spawned and maintained a huge videogame industry and the A2000 had proved extremely popular in the animation industry, most notably on the *Babylon 5* and *Robocop* TV series. But that couldn't last forever. Commodore was aware of this and quickly moved to create new hardware, but unfortunately the new machines it chose to make were poorly thought out.

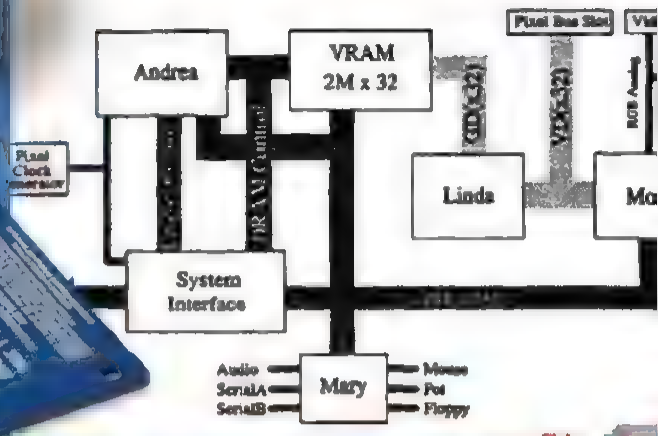
The Amiga 1500, a UK-only model, contributed nothing to the format's future, while the CDTV, and early multimedia box (worthy of its own in-depth feature) was too far ahead of its time and so poorly marketed that it went unnoticed by the general public. A more worthwhile stab at self-improvement came with the Enhanced Chipset found in the A500+ and A3000 but, again, this was far from the major leap in power that was needed when Microsoft's Windows 3.1 was just a

Escom's proposed new Amiga, called Walker, appeared on the front cover of *CU Amiga* and led many to believe that the format would make a strong come back after the fall of Commodore, it never quite worked out, however.

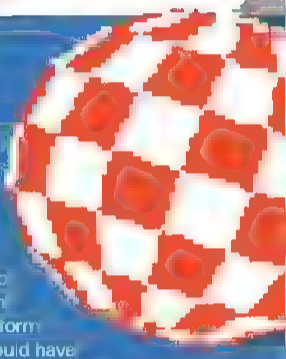




An early Commodore Amiga advert that typically failed to capitalise on the computer's strong points.



David Haynie's schematic for the cancelled AAA chipset. Note how the custom chips still used female names.



year or so away from taking a serious grip of both the home and business markets. All of these new Amigas, which did nothing or little new, only served to confuse and irritate the consumer base – a situation that was made worse with the arrival of the A600, a miniaturized A500+ that looked cool but again, was really nothing new. Arriving just months before the real new generation of Amigas, the A600 was a colossal waste of time and must have taken a massive chunk of Commodore's money and flushed it down the drain.

In 1992, the much-needed new Amigas finally arrived. Commodore had initially been working on the AAA (Amiga Advanced Architecture) chipset, which was designed by Chief Engineer David Haynie, but the project was moving slowly, so a lower-grade machine was put out as a stopgap. Choosing to release two variants once again, Commodore released the A4000 for business use and the A1200 for home use. Both used AGA (Advanced Graphics Architecture) and represented a significant leap over ECS.

Compared to previous Amigas, AGA allowed for some accomplishments but, once again, they were considered obsolete the moment they hit the shelves. Many considered the 68020 processor too slow, while it soon became apparent that a lack of a CD-ROM drive or a dedicated push to get Amiga online would hurt the format in the near future.

"We were really excited about AGA Amigas", says Martyn Brown, "but it was unfortunate that it perhaps came a little too late to save the machine as other systems appeared." Team17 produced three games exclusively for AGA, including the technically incredible *Alien Breed 3D II*. "That game was essentially *Quake* on an Amiga back in 1995/96", Brown recalls. "I think it underlined the problem that if a super-powered Amiga had appeared around 1993/1994, then it may well have not only survived, but gone from strength to strength as the PC market boomed."

Behind the scenes, Commodore had produced three AAA prototypes, but in 1993 the company made the smart decision of scrapping the aging project and starting afresh on a system so advanced that it would set the standard upon release. The system was codenamed Hombre (another Spanish word for friend, except male) and was intended to be a 64-bit RISC based computer, built with both 3D and multimedia specifically in mind. Due to be designed by Haynie, in conjunction with Hewlett-Packard, and intended to take the form of both games console and computer, it could have revolutionised Amiga. But, alas, it was never completed.

In April 1994, just a few months after the ambitious release of the first Amiga games console, the CD32, Commodore was declared bankrupt and ceased all operations. In many ways this didn't represent the end of Amiga. Developers continued to produce games for many years to come, retailers like Electronics Boutique continued to stock software until around 1998, and Amiga-dedicated magazines survived on the newsstands, remarkably, until the new millennium. But without any new Amiga hardware on the horizon, this unique afterlife was destined to dwindle.

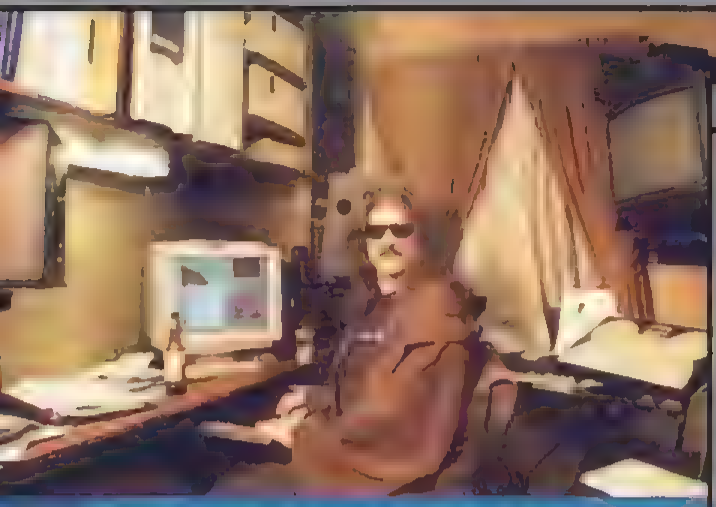
For a time it did look as though Amiga might survive after the death of Commodore, just as it had existed independently before 1983. The majority of Commodore's assets were soon acquired by Escom, who continued to produce A1200s until 1996 and manufactured a tower version of the A4000 in 1995. Escom spoke of licensing the Amiga technology to different manufacturers, effectively opening the machine up to IBM PC-like proliferation, and a new CD-based desktop machine, dubbed Walker, even featured on a 1996 CU Amiga cover. A sub-division of Escom, named Amiga Technologies, was set up, but little of note happened for months.

In 1997, Amiga was auctioned off to the highest bidder, International. Under Gateway, the company produced a new operating system, Amiga OS 3.5, for the classic machines and plans were continued to license Amiga hardware, now Power PC based, to several companies. Again, however, very little actually happened and Amiga found itself in the hands of another owner, Amino Development, in 2000.

Amino Development was renamed Amiga inc and from there things get extremely complicated. In the years since 2000 the Amiga name has been used to brand some minor mobile and web-based software called Amiga Anywhere, while a small effort has been made to create new hardware. Amiga inc contracted a company called Eyetech (made up of former

LAPTOP LEGACY

One of the reasons for Amiga's downfall was that it never truly moved with the times. Why, for example, did the company never cash in on the extremely important laptop market? The blame lies with Marshall Smith, a one-time Commodore CEO who was responsible for some of the company's biggest mistakes. At the 1985 CES, Commodore was showing off a prototype of its first ever portable computer – a compact LCD-screened wonder that impressed attendees so much that 15,000 orders were placed that very day. The computer was never produced however, because the CEO of Tandy, itself a producer of portables, took Marshall Smith to one side and conned him into believing that portable computers would never sell. Smith immediately cancelled the project and shut down the entire portable research and development group. The company never tried to produce a laptop ever again and the Amiga missed out on a project that would have made it much more relevant to users, particularly in the 1990s.



[Amiga] From 1984-2006 the Amiga operating system has evolved considerably.

separate company, Hyperion, was charged with programming Amiga OS4. The hardware, a PowerPC computer called AmigaOne, was completed and sold in very small numbers in 2002, while users had to wait until December 2006 for the final version of OS4.

The existence of new hardware may seem like a big deal after all those years, but since the AmigaOne is both incompatible with classic Amigas and was produced in extremely limited quantities, it can be considered little more than a curio for hobbyists. It is an Amiga in name only. OS4, by contrast, has more in common with the original vision. Its features can be considered a true evolution of the original Workbench ideas and the fact that the OS works on both PPC-enhanced classic machines, as well as new hardware, certainly makes it feel like a member of the family. Or at least a distant relative.

Rumours abound that Hyperion are working on a PPC Apple Mac version of Amiga OS4, but Amiga inc itself claims that it is currently working on an Amiga OS 5 that will run on multiple computer systems. New hardware is even said to be on the way – this time from ACK Software Controls, which announced two new models in 2007. Its plans to produce a Basic Amiga at $500 and a Power Amiga at $1500 are scarily similar to the business model adopted by Commodore during the height of the Amiga's popularity. But we'd be foolish to let such a similarity convince us that anything worthwhile will come of these new developments.

Though the Amiga name lives on, and is still invested in the production of original hardware and software, it is a far cry from the company that began life with the work of Jay Miner and RJ Mical. And that's how we'd prefer to remember Amiga. Not as a confused mess of IP ownership and rights, not as the tragic failure of Commodore, but as a computer that was totally unlike any other and one that spawned one of the greatest videogaming eras.

IMPORTANT DEVELOPERS

Team17

A true rags-to-riches story, Team17 is emblematic of the Amiga's importance to the games industry as a whole. Formed by an alliance of shareware coders and managed by Martyn Brown, who previously ran shareware distributer 17 Bit Software, Team17 took its bedroom programming prowess and harnessed it to become a truly world-class developer and publisher of Amiga software. Early hits like *Full Contact* and *Alien Breed* secured it a place in the hearts of Amiga fans – but it was Team17's decision to help develop Andy Davidson's *Worms* project, when nobody else would, that made it really rich. The team is still around today, it's still independent, and is even working on a new *Alien Breed* for release later this year.

The Bitmap Brothers

One of the coolest developers on the Amiga, The Bitmap Brothers cleverly built an identifiable style into their games so that you could tell something was made by them just by looking at it. Chunky visuals with metallic effects and earthy textures gave Bitmap games, like *Speedball 2*, *Gods* and the *Chaos Engine*, a unique look that stood them apart from anything else on the Amiga. Sadly, The Bitmaps was one publishing house that never really found a way to survive after the death of Amiga. They clung on to the bitter end, releasing the exclusive *Chaos Engine 2* in 1996, before slowly fading away in the PlayStation and PC days.

Psygnosis

As both a developer and publisher, the Liverpool based Psygnosis was responsible for a vast number of classic Amiga days and helped nurture talent across the British games industry. Under its umbrella were DMA Design (*Lemmings*, *Walker*) Bizarre Creations (*Killing Game Show*, *Wiz n Liz*) Traveller's Tales (*Leander*) and Reflections (*Shadow Of The Beast*). All of these developers survive within the games industry to this day, some under different guises (DMA became Rockstar North), while Psygnosis itself was acquired by Sony in 1999 after the phenomenal success of its *WipEout* series.

Cinemaware

If there's one developer that can be held responsible for Amiga's success as a games machine then it is, without a doubt, Cinemaware. In 1986 the company released *Defender Of The Crown* for Amiga and blew everyone away with amazing 16-bit visuals – the likes of which nobody had even imagined until then. *Defender Of The Crown* can arguably take the credit for the phenomenal sales of the Amiga 500 in the late-eighties, but it was Cinemaware's later games that truly defined the developer. Classics like *It Came From The Desert* and *Wings* continued to do amazing things with the Amiga hardware and upheld Cinemaware's reputation for immersive, cinematic experiences.

Lucasfilm Games

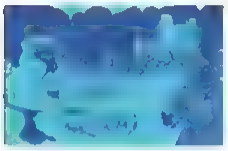
Okay, so most of Lucasfilm's classic games were developed for other systems and then ported to the Amiga, but its innovative graphic adventures were still among the best titles on the system. And we refuse to believe there was a single Amiga owner that didn't play *The Secret Of Monkey Island* at some point. Other classic releases like *Zak McKracken*, *Indiana Jones*, *Loom* and *Maniac Mansion* made Lucasfilm one of the most cherished Amiga developers around, and paved the way for other amazing Amiga adventures like *Beneath A Steel Sky* and *Simon The Sorcerer*.

Sensible Software

Though Sensible Software attracted huge attention in its early days thanks to C64 hits *Wizball* and *Shoot-em-up Construction Kit*, the developer remains best known for two incredible Amiga games to this day. We refer, of course, to *Cannon Fodder* and *Microprose Soccer*. The former is probably the only game ever made to actually make the RTS fun to play and, similarly, the latter is one of the few football games that sport haters could ever be convinced to play. Sadly, Sensible never quite got beyond these two hits. It spent 1992-2000 creating remakes until the studio closed.

CITADEL

BEWARE THE MONKS OF THE CITADEL...



- **PUBLISHER:** SUPERIOR SOFTWARE
- **RELEASED:** 1985
- **GENRE:** ADVENTURE
- **FEATURED HARDWARE:** BBC MICRO
- **EXPECT TO PAY** £5+

HISTORY

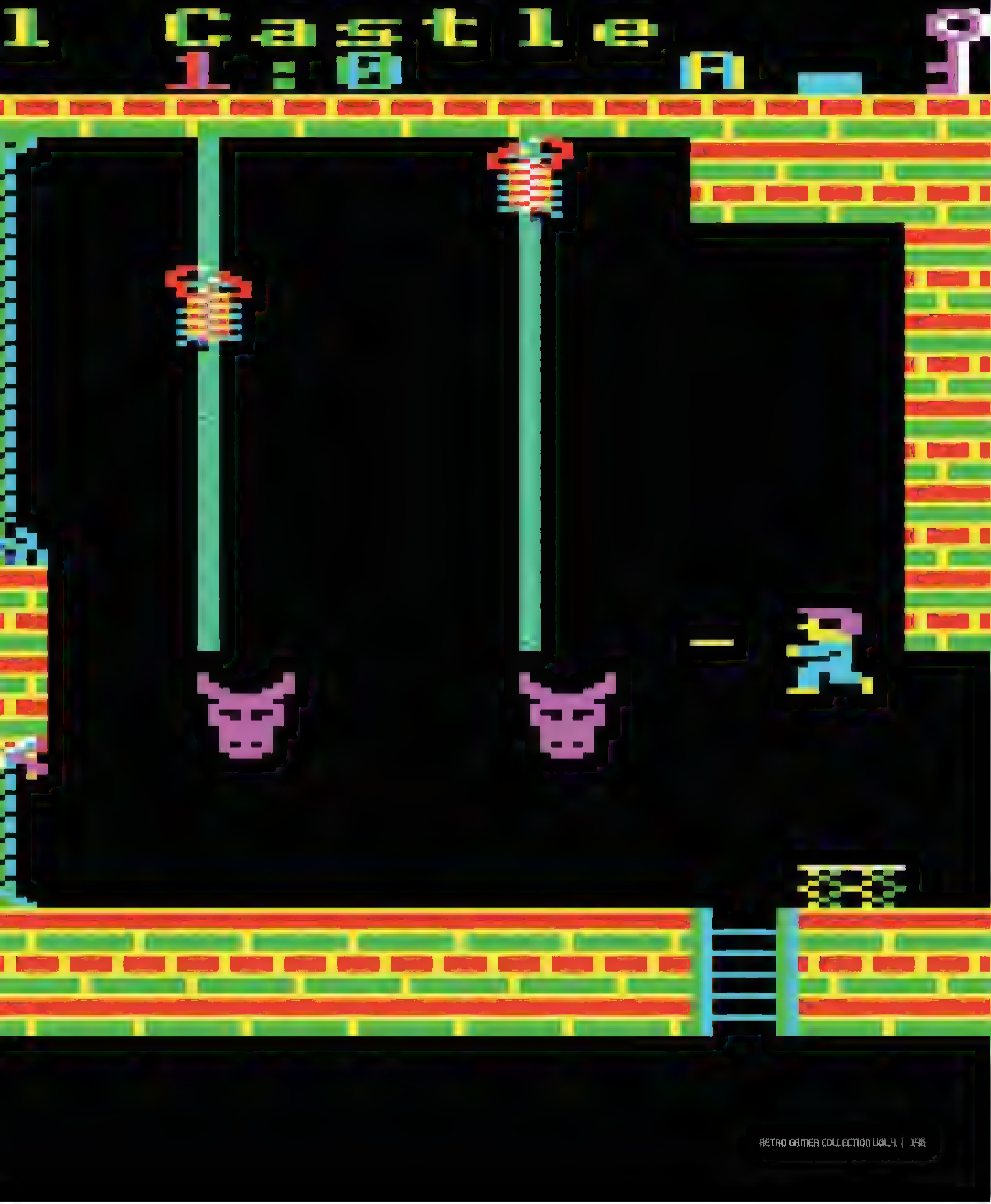
Sometimes it can take a while to appreciate a great game. Of course, the merits of certain titles are immediately apparent from the moment you play them. Some, on the other hand, require you to put a fair bit of effort in before you can start reaping their rewards. Then, of course, there are games like Superior Software's *Citadel* which simply manage to do both.

From the moment Mata Mickey says the word 'Citadel' several times over you know you're in for a treat and Superior Software doesn't disappoint. A brilliant fusion of both the adventure and platform genres, you're required to explore the titular Citadel in search of five hidden crystals and three crowns if you were intent on winning the prize Superior Software was offering while avoiding the bastion's dangerous monks.

As well as cleverly combining two distinct genres, *Citadel* also had several other neat touches that helped set it apart from similar games, with the most notable being the option of playing as either a man or a woman (both of which looked distinctly different to each other). Then there was the fact that touching an enemy wouldn't instantly kill you but would instead rob you of energy. Monks would drain this quicker than other creatures instantly sending you back to wherever you had entered the room, but unlike the other enemies they could at least be despatched with a well-timed hit to the face.

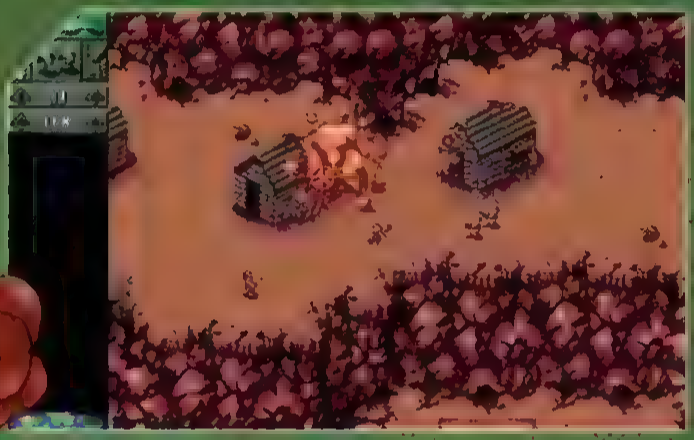
If *Citadel*'s many monks proved to be a pain to defeat then its fiendishly constructed puzzles were even more torturous and would often have you scratching your head in sheer bewilderment. While many were relatively straightforward (drop a chicken under a fireplace to cook it), they became increasingly difficult, especially once you had to start combining the two available items you could pick up on your travels.

Citadel was an instant classic on its release and the last 20 years have done nothing to diminish that fact. Hunt it down if you're looking for a platform challenge that requires brains as well as reflexes.


1 Castle
1:0

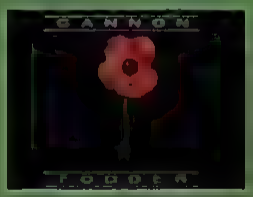
The Making Of...

CANNON FODDER



Jon Hare, designer of seminal Amiga action-strategy game Cannon Fodder, explains to Craig Grannell why war has never been so much fun, along with providing an insight into the as-yet unreleased third game in the series

IN THE KNOW

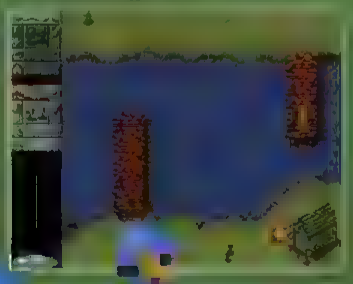


- **PUBLISHER:** VIRGIN
- **DEVELOPER:** SENSIBLE SOFTWARE
- **RELEASED:** 1993
- **PLATFORMS:** AMIGA, CONVERTED TO 3DO, ARCHIMEDES, AMIGA CD32, ATARI ST, GAME BOY COLOR, JAGUAR, MEGA DRIVE, MOBILE, PC, SNES
- **GENRE:** ARCADE, REAL-TIME TACTICS AND STRATEGY
- **EXPECT TO PAY:** £5

Some games rightfully stake their place in history, referred to time and time again as the inspiration behind modern titles. *Cannon Fodder* is not one of them. Despite being one of the earliest titles of its kind, historians are more likely to cite the likes of *Command & Conquer* as leading the real-time tactics and strategy brigade. And yet *Cannon Fodder* arrived two years earlier, combining the unit management of *Lemmings* with the considered bloodshed of *Ikari Warriors* (as opposed to the frenetic *Commando*), tightly wrapping everything up in a layer of deeply black humour. But although *Cannon Fodder*'s story eventually became one of frustration for designer Jon Hare, there's no doubt that the game's development was a different matter.

For the uninitiated, *Cannon Fodder* arrived to rave reviews in 1993, and offered a thoroughly modern style of gameplay. Entirely mouse-controlled, you take a small squad of soldiers on various missions, exploring varied landscapes, blowing things up, rescuing hostages, and driving highly erratic vehicles. The squad can be split into teams, to provide cover for soldiers undertaking more hazardous manoeuvres, and Sensible Software's typically liberal dollops of black humour ensured *Cannon Fodder* further stood out from the crowd.

The game's origins are largely forgotten to Jon today, but he thinks the seeds might have been sown in pre-Sensi days: "Chris [Yates, Sensi's co-founder] and I designed a war game on the back of a wallpaper table. Lots of grids, with various troops and stuff, and some elaborate rules." However, the gestation of the game also stemmed from two other sources during Sensi's early Amiga days. *Mega Lo Mania*, released in 1991, touched on war, if not action, and the team wanted to push the war angle in a new game. Also, experiments with sprite trails proved interesting. "That was the first thing we did for *Cannon Fodder*," says Jon.



» [Amiga] Jon on Boot Hill: "The score focuses you on what's going on, and each soldier has a name, which gives them an identity, since people psychologically latch on to names."

"I HADN'T SEEN A GAME UP UNTIL THAT POINT THAT FOCUSED SO MUCH ON THE PEOPLE THAT ACTUALLY DIED, AND THE IDEA THAT IN WAR PEOPLE REALLY DO DIE"

"There was this trail of sprites, which turned into soldiers, and then we got bullets coming from multiple people."

Jon's keen to downplay certain aspects of his creation. For example, he doesn't consider *Cannon Fodder* particularly innovative – "it's not that different from all the old *Rambo*-style games, and it's a fairly obvious and basic combat game" – although he remains proud of the troop idea. He also dismisses praise regarding the mouse-based control method (click to move to a point, right-click to fire, left and right-click to fire a 'special' weapon), noting that "we were used to using configurations of buttons to do things in our games, and this was an extension of that, really. It's all pretty obvious."

What Jon's keener to talk about is design, the area in which he feels *Cannon Fodder* is most successful. "Level-design-wise, it's the best game we ever did," he says. "From a design point of view, it's quite calculated. I remember drawing the maps with coloured pencils in a Chelmsford library, and we worked out all of the features of the game at the start – traps, spikes, tanks and things you could climb into. I made a conscious effort to ensure that in every level of *Cannon Fodder* you saw something new." For Jon, this was a key aspect of the game – there's always a reason to push forward, because every level provides something you've never seen. "This might be a new piece of background, a new weapon, or a new experience, but there's always something different. That was important to me, to reward the player for getting past each stage," says Jon. "By adding new features and then mixing up the size of maps, length of missions, number of men, and terrain types, you get variety, but also a sense of progress."

The viewpoint, borrowed from *Sensible Soccer* and *Mega Lo Mania*, combined with tight level design provides a tactical component to *Cannon Fodder*, adding depth over the run-of-the-mill run-'n'-gun games like *Commando* that peppered 8-bit platforms. Running around gunning down enemies doesn't get you far – instead, you can and must look ahead, decide what to do, determine whether to split the troops, and use all available resources to your advantage. But with so many elements added to the mix, was the game difficult to get right? "*Cannon Fodder* is just another example of a game with a universe that has a bunch of laws attached to it in terms of how everything works. As long as you get those laws solid and take your time, everything sorts itself out," claims Jon.

We ask whether Sensi's usual complete every level once and move on testing method was employed, which he confirms, noting that with *Cannon Fodder*, the team ensured the game mechanics were nailed down and that each level could at least be completed with fairly junior guys. And we then mention mission eight, where the difficulty curve suddenly became a wall. "It's the most ridiculous use of *Cannon Fodder*'s game mechanics, and it's

POP STARS

Cannon Fodder's soundtrack included an insanely catchy white reggae number with flashings of black humour in its lyrical content. Along with the song's title, *War! Never Been So Much Fun*, was the couplet "Go up to your brother, kill him with your gun/Leave him lying in his uniform, dying in the sun."

This mix of jaunty reggae and sombre lyrics hammered home the game's satirical edge. "I've been writing music since I was 16, and Chris and I were in loads of bands," explains Jon, who wrote the initial version of the *Cannon Fodder* song, which comprised a bassline, two guitar chords and some vocals.

Regular Sensible collaborator Richard Joseph then knocked it into shape. "He got all the parts down, and we added bits of horns and percussion and elements of arrangements," says Jon. "Rich then very cleverly broke it up into samples, and made it work within the technical limitations of the Amiga."

» [Amiga] Jops and R.I were annoyed that they only had grenades to hand and not some thick woolly socks.

The Making Of... CANNON FODDER

[Amiga] Freebie *Cannon Soccer*, given away with one of *Amiga Format*'s Christmas issues, finds you battling legions of enraged soccer players.

[SNES] Jon on the console versions: "*Cannon Fodder* holds up fairly well on them – not as well as with a mouse, because it was designed for one, but it wasn't a disaster without one."

about not panicking in a crisis," says Jon, adding, with more than a hint of wryness, that it's his favourite level.

Elsewhere, Jon's approach was surprisingly hands-off. With previous titles, he'd been responsible for most game visuals, but Stoo Cambridge took those particular reins for *Cannon Fodder*. "The graphics were based on the style of *Sensible Soccer* and *Mega Lo Mania*, but Stoo added his own style to it," recalls Jon. "He was very much into cartoony stuff, and so some of his humour came through, which is good."

Humour was apparent in most Sensi titles, and Jon considers that the company's approach was to be not too serious about what it was doing, but to keep things clean. "This approach was similar to Nintendo's – the games were fairly humorous, but we were always thorough about making everything polished. Our treatment of *Cannon Fodder* was about as light-hearted as you can get for a war game, while covering a serious issue. I guess it was just our style."

When *Cannon Fodder* was released Amiga owners bought it in droves. It leapt to the top spot in the all-format charts, and reviewers couldn't heap enough praise on the game, typically awarding scores higher than 90%. Not everyone was as impressed, though. The game's humour and poppy usage hit a nerve. The British Legion was up in arms, and the *Daily Star* started a campaign to sink the game, quoting such gaming luminaries as, erm, Sir Menzies Campbell MP, who waffled: "It is monstrous that the poppy should be used in such a way."

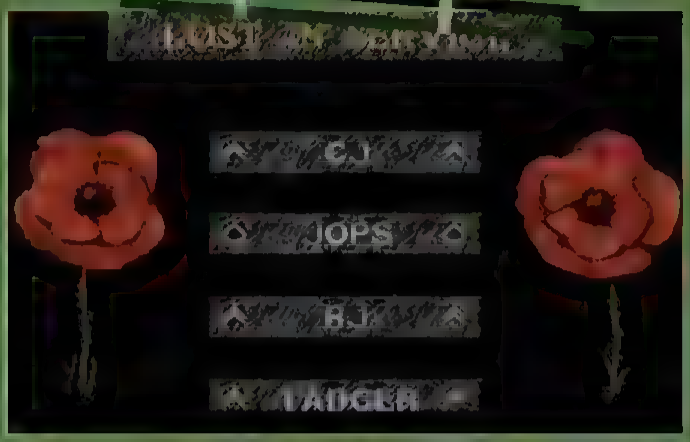
Jon is unrepentant about the criticism that was levelled at the game by such quarters: "What irritated me is that they'd obviously not played it." When we suggest perhaps Sensi was courting controversy, Jon disagrees: "I think we did the opposite. I'd not seen a game up until that point that focused so much on the people that actually died, and the idea that in war people really do die. We named everyone and showed all their graves on the Boot Hill screen. That effect really works for anyone who's played it for any length of time."

He also reveals that for all of its bluster, the British Legion was most concerned with rights issues: "Basically, they were annoyed that we had used their poppy. In the end, they said 'if you give us 500 quid, we'll keep quiet', and so we paid them off." Jon notes that he's never bought a poppy since: "I bought all of my poppies in 1993, and I actually thought f*** them – they come on all moralistic, and you can pay them

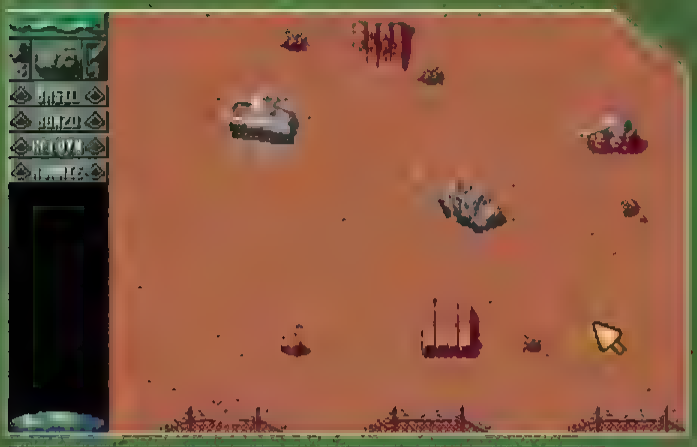
"PEOPLE TALKED ABOUT COMPUTER GAMES BEING THE NEXT ROCK 'N' ROLL AT ONE POINT IN THE PAST, AND OUR APPROACH WITH CANNON FODDER WAS AS NEAR AS ANYONE REALLY GOT TO THAT"

[Amiga] Bomber valiantly fights on alone, taking out the evil blue guys, but admiring their most excellent snowmen.

The Sensible Software development team in all their military get-up.



[Amiga] The names of the fallen are displayed after each mission – perhaps the first videogame to do so. And yet hatemongers still claimed the game was insensitive to war.



[DOS] Later levels enable you to hurtle about the place in various vehicles, which are borderline uncontrollable.

off with 500 quid... There's a big lesson there about how companies work..."

Although the reaction of politicians and the non-gaming press left a bad taste, *Cannon Fodder* persevered – for a time at least. Conversions for 16-bit consoles in 1994 remained somewhat faithful to the Amiga original, as did the Game Boy Color release in 2000. A sequel also appeared for the Amiga in 1994, with **Retro Gamer**'s Stuart Campbell on level design. "*Cannon Fodder 2* was our first attempt at delegating design elements. Stuart worked with the artist, and the game used the original *Cannon Fodder* engine," says Jon. "To be honest, it wasn't managed as tightly as I'd have liked, in terms of art and level flow, but I think Sensi went through a period of being greedy, trying to capitalise on its success, in terms of how many products were being simultaneously produced. *Cannon Fodder 2* suffered a little because of that."

Sadly, the third game in the series has yet to materialise, despite several false starts, and despite Jon working on *Cannon Fodder 3* being part of the deal he struck with Codemasters when the publisher bought Sensible Software in 1999. "This is a source of great frustration for me, because *Cannon Fodder 3* had a full design – and it's a great design," says Jon, who's only too happy to share what might have been.

The basis of *Cannon Fodder 3* retained the idea of a troop fulfilling objectives in varied environments, but the scope was bigger. "The individual soldiers were brought out more – they were different and there were experts in different fields," says Jon, adding that characters grew with their skills. "And the plot was great – all about being a world peace force, aiming to overthrow six despotic forces around the world, each of which had its own disaster condition, such as successfully building nuclear missiles. But as you could only fight one at a time, problems elsewhere got worse, raising the difficulty level there."

Jon notes that the concept highlighted the personality of the despots and soldiers, and the game's visuals, which had a kind of 3D Disney-esque feel, would have further brought that to the fore. He also makes comparisons with Bond, talking about tiny *Cannon Fodder* guys climbing mountains, finding experts and adding them to the team, abseiling down the other side, and then meeting a guy coming the other way with a tank. "It was really enjoyable to work on, and it's a pity it never went anywhere," says Jon, adding that he preferred the game to the original *Cannon Fodder*. **Retro Gamer** suggests a visit to Codemasters' headquarters to ask what it's playing at not getting this game out right now, but Jon thinks the series' time has been and gone. "*Cannon Fodder*... it's old now, and I don't know what else you can do. Sometimes, you just have to leave it."

Perhaps *Cannon Fodder* will rise again, though, either as a handheld-based remake or an entirely new title, and its rightful place in history will eventually be confirmed, once people realise the American pretenders of the day didn't actually come first. In the meantime, we still have one of the best games ever made to play via various means, and Jon has some great memories of working on the classic Amiga title. "The humour and things like the video we made defined what Sensible Software was about as a company, and I really miss those times when you could just do something like that off the top of your head, and not just get away with it, but people would like it," says Jon. "People talked about computer games being the next rock 'n' roll at one dismal point in the past, and our approach with *Cannon Fodder* was as near as anyone really got to that."

DEVELOPER HIGHLIGHTS

SEUCK
SYSTEMS: C64, AMIGA, ATARI ST
YEAR: 1987–1989

MEGA LO MANIA
SYSTEMS: AMIGA, ATARI ST, MEGA DRIVE, PC, SNES
YEAR: 1991–1993

SENSIBLE WORLD OF SOCCER (PICTURED)
SYSTEMS: AMIGA, PC, XBLA
YEAR: 1994–2007

MAKING MOVIES

To augment *Cannon Fodder*'s pop song (see 'Pop stars' boxout), Sensible Software created a video for the CD32 version. "We'd been doing our own promotion for a while and thought it'd be fun to do a promo video," recalls Jon, noting that Sensi had a suitably band-like six people at the time.

"The video cost very little – a few hundred quid," says Jon, who remembers working with a local news-station cameraman, getting uniforms from the local fancy dress shop, hiring an army vehicle (with driver) and then looking for a shooting location. "We found a field with poppies in, and the old lady who owned it was happy for us to film there," says Jon. "We were quite lucky, really, and it's another example of how things sometimes just worked well – I wrote a script and a bunch of scenes, we filmed it, got it home and edited it. Then again, I did drama at college, and so music and theatre are pretty normal to me."

遠くの稀で、エキゾチックなゲームを愛する人々のため

FULL OF EASTERN

ONE OF THE MOST EXPENSIVE SATURN GAMES AROUND, BUT IS IT ONE OF THE BEST?

SHINREI JUSATSUSHI TAROMARU

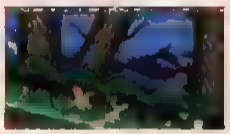
Why Time Warner Interactive's ninja game deserves your full attention

IN THE KNOW

- **PUBLISHER:** TIME WARNER INTERACTIVE
- **DEVELOPER:** IN-HOUSE
- **FEATURED HARDWARE:** SEGA SATURN
- **ALSO ON:** N/A
- **GENRE:** SHOOT 'EM-UP
- **RELEASED:** 1997
- **EXPECT TO PAY:** £270+

CAN'T IMPORT? WHY NOT TRY . .

ALISIA DRAGOON



Sega's Mega Drive title is nowhere near as impressive as *Shinrei Jusatsushi Taromaru*, but it features very similar gameplay and is far easier (and cheaper) to get hold of. Check it out if you're looking for some classic 16-bit fun.

IN THE BELLY OF THE BEAST

If only all bosses were like this... *Shinrei Jusatsushi Taromaru* has some cracking bosses, but the giant frog that awaits you at the end of one of its lengthy stages is easily its most spectacular. Swatting at you with its giant arms as you run along a floating log, the giant amphibian eventually braces itself and begins to suck both you and your floating platform into its huge waiting maw. After you've been spat out – losing a fair amount of energy along the way – you're eventually paired with frogspawn until the whole process begins again. Even the frog's death leaves little respite for you as you're sucked into its cavernous mouth and must then battle against stomach juices and disgusting segmented worms in order to earn your freedom. Gruesome, brilliant stuff that never gets tiring no matter how many times we play through it.

メガ駆動機構

Sega's Saturn is no stranger to expensive games, with *Radiant Silvergun* and *Panzer Dragoon Saga* rarely leaving you much change, if any, from £100. Despite that rather princely sum of cash there's a Saturn game which continually sells for even larger piles of money, and unlike its peers it continues to climb in price.

That game is Time Warner Interactive's *Shinrei Jusatsushi Taromaru* – more commonly known as *Psychic Killer Taromaru*, *Spirit Killer Taromaru*, *Psychic Assassin* or for the sake of this article, just *Taromaru* – and it's a truly spectacular effort from a company that had barely found its place in the videogame industry before it was quickly bought out by Midway Games. Of course, some would argue that oblivion is a suitable fate for the studio that unleashed the likes of *Cheese Cat-Astrophe Starring Speedy Gonzales* upon the world, but the brilliance of *Psychic Killer Taromaru* argues otherwise and, while it's not exactly in the same league as *Saga* or *Silvergun*, it's nevertheless a Saturn title that all fans of the machine should experience.

Taromaru quite frankly looks stunning and it features a level of graphical trickery that you'd usually expect to see from a Treasure title – interestingly Hiroshi Iuchi, one of the graphic artists, worked on the likes of *Gunstar Heroes* before returning to Treasure. Granted, it doesn't boast the most colourful of palettes but it constantly manages to impress with its sheer verve and audacity. Scaling, rotation, transparency effects, amazing-looking water – an insane amount of spectacular-looking effects continually assault your battered retinas, and while some might argue that certain

▪ [Saturn] You can't see it here but this background actually spins around as you're moving along. It looks absolutely brilliant.

GAMES FROM THE EAST WHICH NEVER MADE IT TO UK SOIL

PROMISE

» [Saturn] This skeleton occasionally belches forth a huge sheet of flames that needs to be jumped over. Impressive stuff

sprites look a little rough around the edges – they do – they'll still be picking their jaw off the floor by the time they've seen every last boss and level that *Taromaru* has to offer.

Utilising a 2.5D structure that has proven popular with more recent releases like *Viewtiful Joe*, *Ultimate Ghosts 'N Goblins* and *Castlevania Chronicles*, *Taromaru*'s levels are just as impressive as its visuals, with your ninja battling through a variety of different environments before he finally reaches his goal. Quaint Japanese villages, a treacherous boat crossing, a desperate race through a burning building – the list goes on and on. Granted, many of the levels are fairly generic in their structure and have been seen a hundred times before in similar games, but they've been constructed so thoroughly that you can't help but be impressed by them.

If *Taromaru*'s intricately detailed levels and beautifully animated sprites impress you, then just wait until you witness the ridiculous amount of amazing bosses that are constantly thrown at you. In another nod to Treasure, the many bosses you face are intricately designed and normally require an insane amount of hits before you can actually defeat them. They also feature devious attack patterns, meaning it's going to take a fair amount of working out and damage, before you discover the best way of defeating them. Fire-breathing skeletons, huge undead spiders, pulsating cubes, demonic floating faces, the list goes on and on and you'll find yourself constantly persevering with *Taromaru*'s often fiddly controls, if only so you can see what the next bizarre creation is.

Indeed, the only fly in this otherwise excellent ointment of oriental shenanigans is that *Taromaru*'s controls can be... well a bit of a bitch at times. While the game itself is very fun – think *Shinobi* crossed with the Mega Drive game *Alisia Dragoon* – the actual controls can take a hell of a while to get used to and, for many, won't justify the £200 price tag it often goes for. Unlike many other *Shinobi*-styled games, you actually control an icon that floats lazily from enemy to enemy. Pressing the B button will attack foes, while continual stabs of the A button will turn certain enemies to your side until they're eventually defeated.

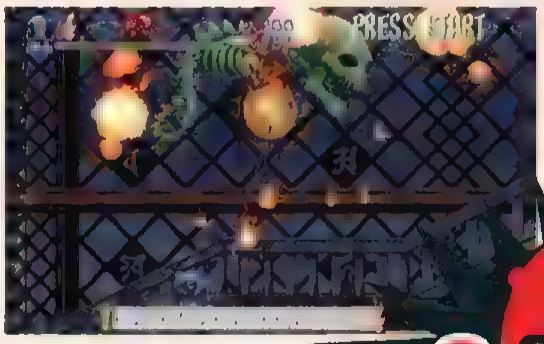
Needless to say, this cursor can sometimes have a mind of its own and won't necessarily lock on to the biggest threat (although you can select different opponents manually), which can be a bit of a pain, especially as enemy attacks are relentless. Then there's the fact that you can't move whilst firing – unless you're in the air – which instantly makes you an easy target. Now, some would say that this simply adds to the challenge, and while that's true – to an extent – it just makes combat in *Taromaru* far trickier than it actually needs to be. It's a shame as this is otherwise solid stuff. A double tap to the left or right will cause your ninja to run in that direction, the C button handles jumping (hold down first for a *Castlevania*-style slide move), while the Y button... or a quick double tap down... throws up a handy shield that blocks most enemy attacks.

Another issue with *Taromaru* is its insane difficulty level. Sharing all the hallmarks of an arcade game, *Taromaru* has ridiculous difficulty spikes that can be a real chore to play through if you flying solo (the addition of a second player obviously makes a huge amount of difference). As with most shmups, perseverance eventually pays off and it won't be long before you can use the available credits to fully complete *Taromaru*, but it's certainly frustrating while you're doing so.

Luckily, things become far easier and enjoyable when you have a friend in tow, but we can't help wondering how much better *Taromaru* would have fared if its controls were that little bit tighter.

Don't get us wrong, *Shinrei Jusatsushi Taromaru* is not a poor game by any stretch of the imagination. It's just that compared to many of the other big hitters in the Saturn's back catalogue, it just doesn't have quite the same quality attached to it, especially considering its huge price tag. It's definitely worth experiencing, simply because it pushes the machine in directions that only Treasure would have thought of, but you're going to have to have very deep pockets in order to appreciate everything Time Warner's game has to offer.

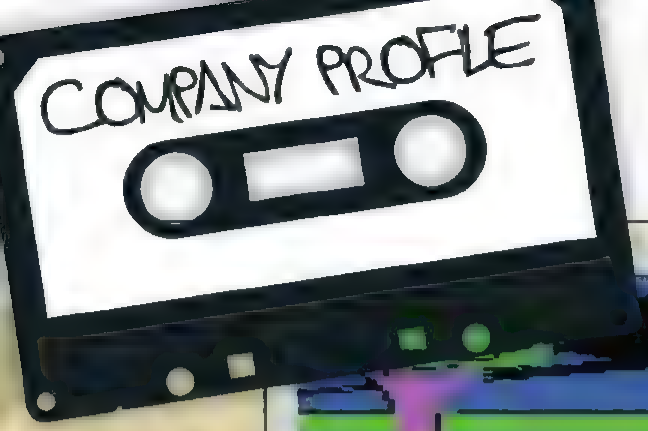
» [Saturn] Another difficult boss that's a nightmare. You need to attack it whilst staying within that tiny gap

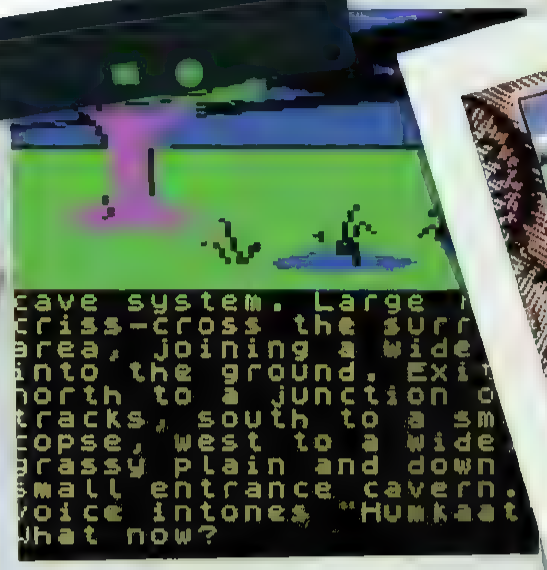


» [Saturn] The controls are tricky to begin with, but once you've mastered them it all comes together

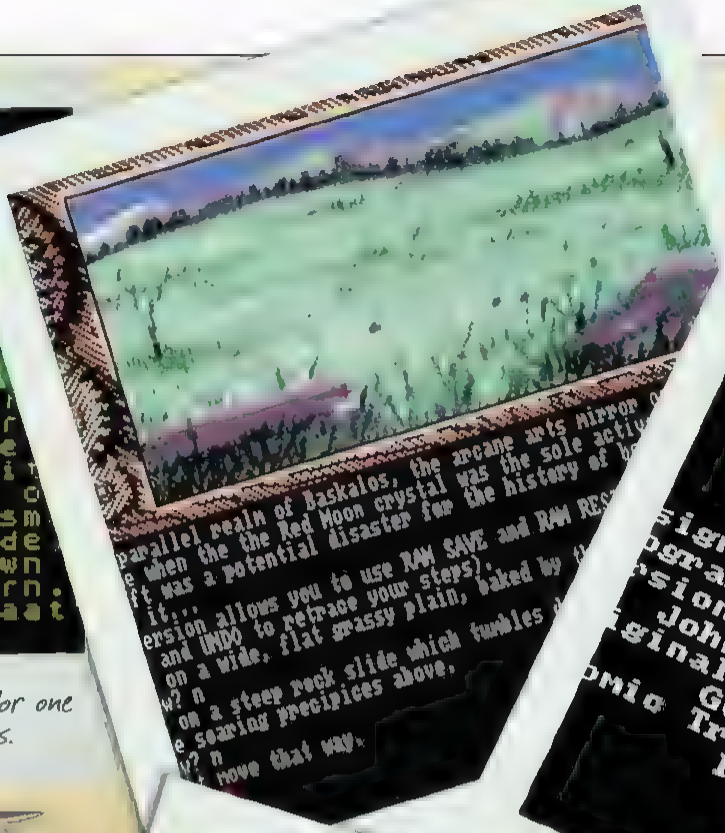
私を読み、私に書くことができ、私に知らせれば好みのゲームはある

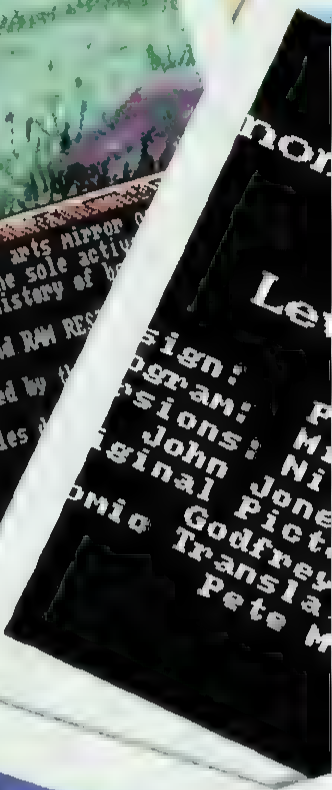
COMPANY PROFILE

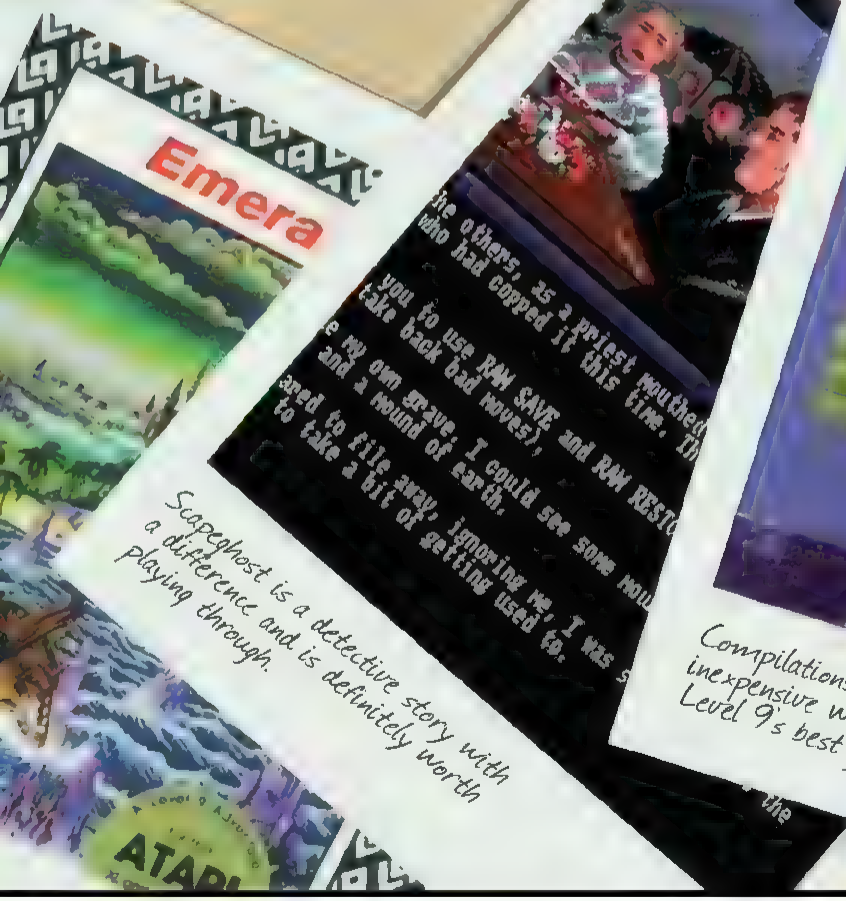




Red Moon became the inspiration for one of Oliver Frey's greatest crash covers.







Scapeghost is a detective story with a difference and is definitely worth playing through.

Compilations turned out to be an inexpensive way of discovering some of Level 9's best games.

LEVEL 9

Paul Rigby takes a look back at the life and times of family-run developer Level 9, one of the most highly regarded creators of text adventures in the UK...

» [C64] The 'Oops' command was a great way of redoing bad moves and went on to appear in many Level 9 titles.

The text adventure was a tough genre to crack successfully. It required you to stuff next to no RAM with an advanced AI, an able and comprehensible parser that could communicate successfully and sensibly, and design a world that, no matter how bizarre the subject matter, made sense. Never mind that you had to think up new and more devilish puzzles, create a storyline, be able to string a whole sentence together (sometimes with words of more than one syllable) and, saints preserve us, actually be entertaining into the bargain. Is it any wonder that so many individuals and companies tried and failed to deliver the goods? Text adventure history is spotted, strewn and sprinkled with brave attempts and magnificent failures. It was, therefore, a minor miracle to find one software development team who not only managed to produce great games, but did so with consistency – Level 9.

Often seen as the British version of that other great adventure software house, America's Infocom, partly because of its extensive catalogue, innovative approach to design and complex puzzles, Level 9, in fact, began life selling a language, BASIC, based upon a rather 'basic' computer – the Nascom – the UK's most successful kit computer. Level 9 went on to create a compression assembler called Compass for the Nascom and then diversified into games. It created its own take on the classic arcade blaster *Asteroids*, plus *Fantasy*, a title which resembled the popular Spectrum release *Valhalla*. The programming wizard behind the company, Pete Austin, in an interview with *Sinclair User*, described *Fantasy*. "There were a lot of characters wandering around who changed according to your actions," he said. "What I did was to make it print out in proper English. I'm interested in the user interface, what used to be called front end programming."

Pete, a Cambridge psychology graduate, was only one part of the family business that was Level 9. Sharing programming duties were brothers Nicholas, who studied computer science at London University and Michael, who read engineering at Southampton University and would later create an entire programming language that would power Pete's own adventure writing system, called A-code. Fronting the company was sister Margaret, who handled all of Level 9's marketing activities, while their father, John Austin, would later become Level 9's managing director.

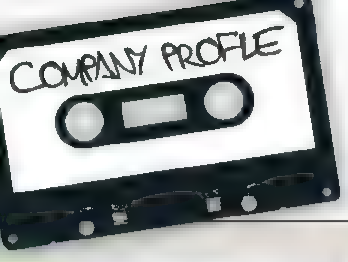
While working with the mainframe manufacturer, Perkin-Elmer, it was Pete's long-term interest in tabletop gaming in the fields of both wargaming and Dungeons & Dragons, that made him sit up when he stumbled across a strange game created by two Americans named Crowther and Woods. Called *Adventure*, it was to dominate Pete's lunch hours. "There had been a number of simpler games on the computer at Cambridge, based on the D&D format," he says. "*Adventure* was full of puzzles, many of which were extremely unfair. I cracked it in two weeks."

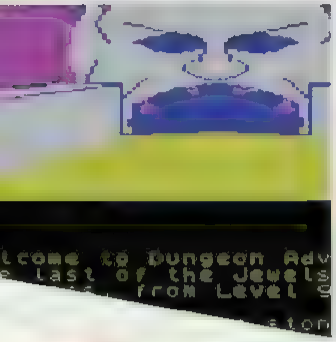
Which is pretty good going, as most people were taking months to complete the program, which was to go down in history as the very first text adventure. The original mainframe *Adventure* consisted of 70 locations and spanned 200K, a hefty amount of code in those days. It makes the subsequent creation of *Colossal Adventure* (1983), Level 9's first 'proper' text adventure based upon the original *Adventure* code, expanded by 70 locations and squeezed into just 32K, a real marvel for its time.

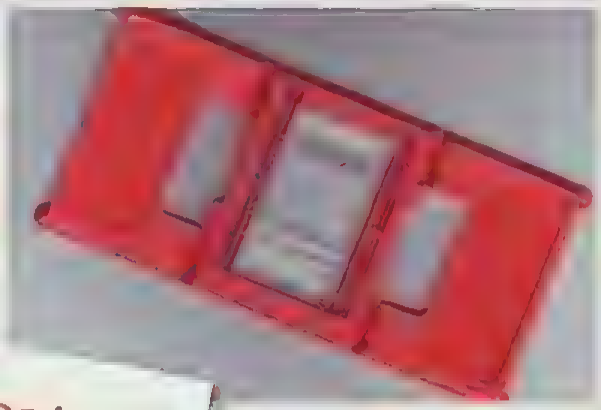
One of the reasons for the efficiency of the code itself is Pete's own text compression program, a piece of code that was used for all of Level 9's subsequent adventures. Here's how it worked. Imagine that you've got a word ending in 'ing' – read any piece of text and you will see those three letters pop up pretty frequently. Pete's compressor would replace those three letters with a single piece of code. Immediately, you've shrunk the location description. Then, repeat for other frequent words and the size of that text begins to shrink further. Later, Pete would adapt the text compressor so that he could store a large amount of graphics. Using

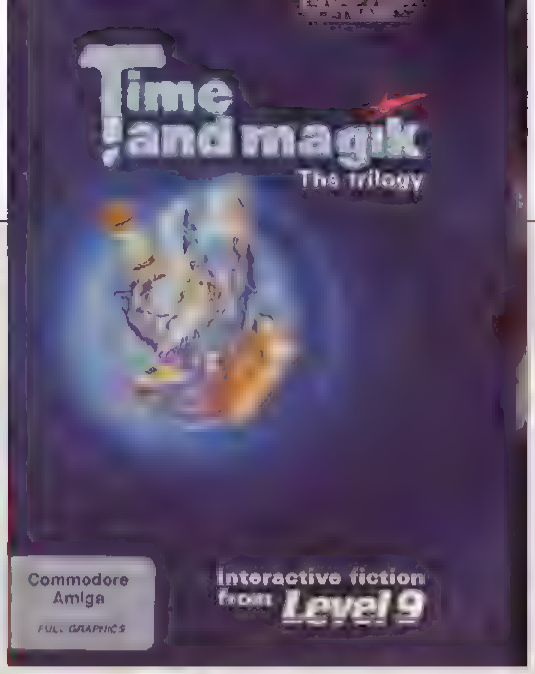
WHAT'S IN A NAME?

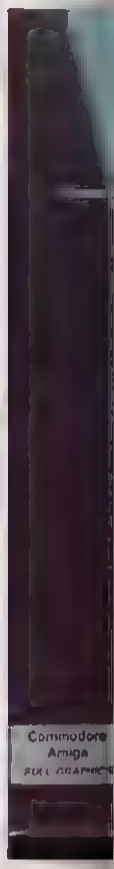
When you think about it, the Level 9 moniker is an odd name to give a company and, on the face of it, appears to be full of numerical meaning. So where did it come from? "Levels are the sort of things you come across a lot in dungeons," mused Pete. As for the numerical addition? Chance, it seemed, played a major part. "It's useful to have a number in the title. For one thing, you can slip adverts in your own games. You'd be surprised at the number of times nines turn up in our adventures.

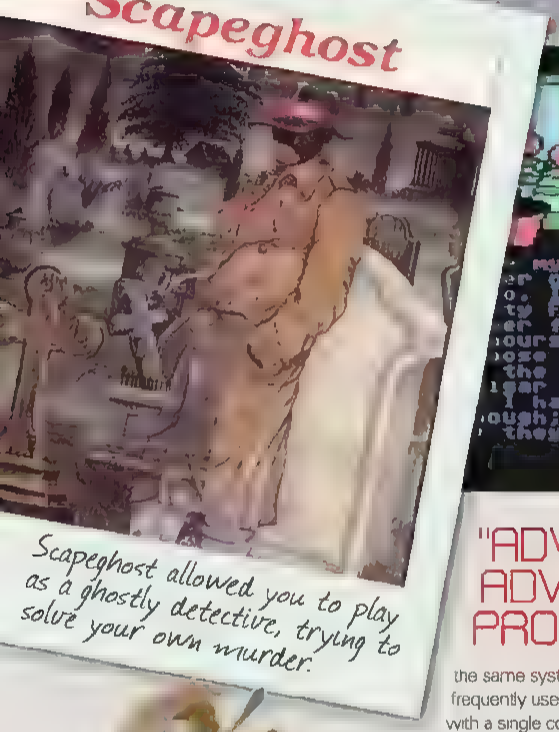




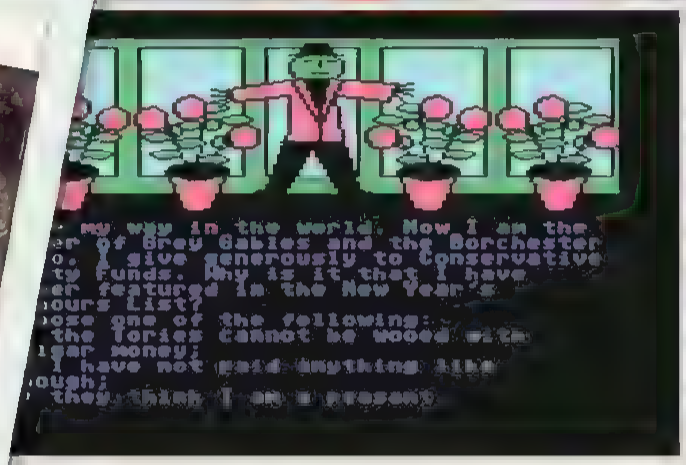


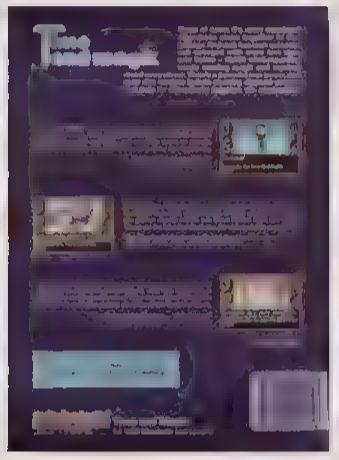






Scapeghost allowed you to play as a ghostly detective, trying to solve your own murder.





"ADVENTURE QUEST BECAME THE FIRST TRUE ADVENTURE GAME TO BE INDEPENDENTLY PRODUCED BY THE COMPANY"

IN BRIEF

Spawned from the fire that was the original Crowther and Woods mainframe version of *Adventure* – the first ever text adventure – Level 9, a family-run business that featured a coding team of three brothers, rose to become a major force in UK text adventures. Creating some of the most sophisticated game engine routines in the world, Level 9 ultimately produced some of the most advanced text adventures for the 8-bit computer and would also push the boundaries for character-driven puzzles. The company produced 20 games including a number of extraneous games based on popular brands.

the same system of replacing frequently used bits of images with a single code. Pete was able to squeeze a location image into just 30 bytes.

It is possible that the hard work that the brothers invested in the early days of their development extended the life of the company itself, if not allowed them to retain their place as an independent company. Andrew Deeley, who coded for Level 9, recalls that, "... with so many 8-bit computers on the market and the [later] introduction of Macs, Amigas and Atari STs developing for cross-platform versions of a game was becoming prohibitive in costs back in the late-Eighties and early-Nineties. Level 9 was able to hold its own as a small developer because it was able to optimise cross platform." And what a list of 'platforms' they were. Level 9 games appeared on the Sinclair Spectrum, Commodore 64, BBC B, Enterprise 64, Memotech MTX 512, Nascom, Nimbus, Oric 48K, Spectravideo 328, MSX, Amiga, Atari ST, PC, Amstrad PCW and Amstrad CPC.

Because of the multi-platform approach to its games, Level 9 found opportunities to modify and enhance its creations in both technological terms but also regarding packaging. Before the more familiar boxed versions, the initial incarnation of *Colossal Adventure* arrived in a resealable plastic bag plus a manual and a card which, if you were stuck, you could write to Level 9 and request a clue. This area was initially handled by Pete until the trickle of clue requests became a flood and Pete found that it was taking over his entire working day, leaving no time to actually develop new games. This unfortunate side effect to the increase in the popularity of Level 9's games led to the development of a more extensive, all-inclusive clue sheet.

The creation of the company's second game was a milestone. *Adventure Quest* (1983) became the first true adventure game to be independently produced by the company. Following a relatively standard pattern, the design of *Adventure Quest* took around two months to complete with a further two months to programme and a final two months to generate the computer tapes, packaging and the like. Taking a similar Middle Earth-like theme to *Colossal Adventure*, *Adventure Quest* was a sleeper. Reportedly suffering from low sales, initially, the game steadily grew in stature and reputation for both its entertaining problems and in-game atmosphere.

That atmosphere continued with the third release. A game that would eventually become the final part in a fantasy trilogy later to be boxed as a compilation called *Jewels Of Darkness* (1986), *Dungeon Adventure* (1983) continued the Middle Earth theme and introduced a magic system seemingly derived from the popular tabletop role-playing game Dungeons & Dragons. Featuring over 100 different puzzles, this traditional adventure – basically, a treasure-hunting exercise – has gained a reputation for being tough, yet tremendously entertaining.

Having, apparently overdosed on fantasy elements, the Austin brothers shifted their focus towards sci-fi and the first of what would become a new trilogy. In *Snowball* (1983), you awake from a deep-freeze sleep on a transport ship, apparently hurtling

towards a star and certain death. But *Snowball* was a controversial game. Despite receiving universal praise from initial reviews, many did see its marketing as a con. Boasting 7,000 locations, the game only provided 200 of any note, plus 6,800 in the form of a maze. That said, the game did show progress with lengthy responses to the 'Exam' command. This game also consciously addressed sexism, referring to the principle character as Kim to give a purposefully androgynous slant to the hero (or, indeed, heroine).

Level 9's second sci-fi adventure title, *Return To Eden* (1984) provided a breakthrough as the accompanying magazine advertisements declared this title to be Level 9's first, full-colour text/graphics adventure, a move that appeared to have been a result of retail pressure more than by a necessity of design. Graphic quality was poor, however. Basic and lacking in imagination, this 'feature' looked what it was – an afterthought. The game itself, however, was interesting. "It's an alien theme park gone wild," says Pete. "The Eden universe is more like [sci-fi author, Larry] Niven's future space." And, about the plot, he says: "*Return To Eden* is intended as a comment on superpower intervention in the Third World."

The final game in the science-fiction sequence was the *Worm In Paradise* (1985) (later forming the final part in the *Silicon Dreams* trilogy), which continued the Austin brother's socially aware plotting, concentrating on a society stifled by bureaucracy, controlled by robots who treat the occupying humans like pets. The puzzles remained involved and often difficult but, technically, the improvements continued with an enhanced, full sentence parser.

Acting as a sort of 'breather' and standing alone as an adventure title, *Emerald Isle* (1985) found you parachuted onto an island in which you stumble on to a lost civilisation. Level 9 intended this game to be a 'quickie' – but that is a matter of opinion! While an enjoyable adventure, *Emerald Isle* illustrated that, despite – or maybe because of – the vast complexity of the Level 9 game world, there were always glitches in the system. For example, if you submerged yourself in water and then typed 'Drink water', you would be told 'You can't see any water'.

Before the launch of the next major trilogy, Level 9 dived into the depths of commerciality with three games based upon varyingly successful brands. Arcade games were used to this sort of thing, of course. New *Batman* film on the way? So is the new *Batman* game. In the more studious and refined atmosphere that was the text adventure market, however, this sort of crudity was still permeating through the hallowed halls of literary endeavour. Even so, when the

LEVEL UP

Selecting the best adventures from a quality catalogue is tough. However, this half dozen is the cream of the crop...

ADVENTURE QUEST
The premise of the game isn't unique but this treasure hunt is still packed with great puzzles and, location by location, it drags you into the game world, increasing the tension and your ultimate involvement. With over 200 locations, *Adventure Quest* is arguably the best of the initial *Jewels Of Darkness* fantasy trilogy.

RED MOON
With a host of features including an excellent 'type ahead' option that keeps the gameplay ticking over nicely with interesting 'magik' and combat routines, where this game really shines is in its imaginative storyline. As *Red Moon* unfolds it becomes clear a great deal of thought has gone into its construction. *Red Moon* is computer adventuring at its best.

RETURN TO EDEN
The sequel to *Snowball*, this sci-fi based adventure is filled with great puzzles and a real sense of pace. In fact, like the beginning of *Snowball*, from the start, the tension dial is rammed to ten as you are placed in a perilous situation right from the off with tasks to do immediately to prevent your imminent demise.

LORDS OF TIME
An engaging adventure with beautifully written text and a well-researched premise, *Lords Of Time*, being a time-travel story, also provided you with plenty of variety (tackling everything from knights to dinosaurs), which kept the story fresh and your puzzle-solving skills honed. Look out for some nice graphics in the 16-bit version by Mandarin Software.

PRICE OF MAGIK
It might not have the complex character interaction of later efforts, but *Price Of Magik* does offer a mature parser in which you can string a selection of commands together using commas. *Price Of Magik* is a well-designed game, featuring well-described locations, an interesting spell system and attractive yet fiendish puzzles. Again, the graphics were improved for 16-bit.

INGRID'S BACK
Full of fun with some improved writing and better quality jokes than its prequel, *Gnome Ranger*, this game saw a more mature version of the KAOS game engine with enhanced game characters, plus a more sensible implementation of complex commands such as 'Follow' and 'Find'. Not the hardest Level 9 adventure game but one of the most pleasurable.

SCAPEGHOST
A game by which Level 9 cocked its hat and rode off into the sunset. The final adventure game the company ever produced, providing the most refined example of the KAOS game engine, supplying complex puzzles, offering you the best graphics the company ever produced and, most of all, serving up a literary treat that set an atmospheric ambience.

COMPANY PROFILE

INFLUENCES

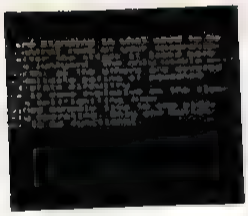
Level 9 influenced the adventure market in many respects. Arguably, the following games reflected the company's prowess...

THE PAWN – MAGNETIC SCROLLS
For a time, Magnetic Scrolls was a label mate of Level 9 under the Rainbird banner. *The Pawn* was the first adventure released by this UK outfit. Initially aimed at the 16-bit market, *The Pawn* was hailed for its quality graphics, with even computers such as the C64 looking sleek and sexy – until another look led to an appreciation of the literary aspects of the title.

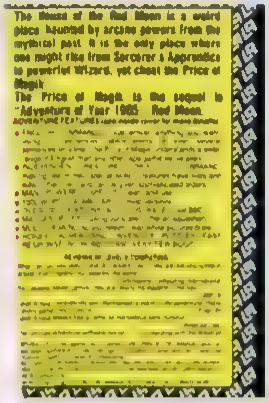
LORD OF THE RINGS – MELBOURNE HOUSE
Offering a freedom of play that provided a great deal of movement but also left the gamer feeling a little confused about what to do, this title, nevertheless, was based on an advanced game engine called Inglish and provided a mighty story to push the game along. A selection of bugs and slow gameplay did try the patience but it was a brave design

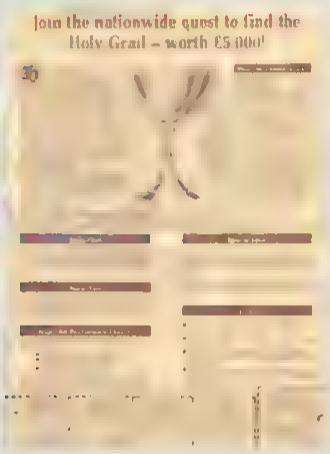
HOMEBREW – VARIOUS
Don't recall *Homebrew* on the Various label? Actually we refer to the array of home-made adventure titles developed over the country via popular third-party utilities such as The Quill, PAW and GAC. They led to a gamut of privately published games that were often reviewed in the glossy magazines. While some of the releases suffered from various defects, varying in quality, others surprised by reaching creative highs.

THE BIG SLEAZE – DELTA 4
Delta 4 was a developer big on humour and on sending up respectable productions such as *The Hobbit* (*'The Boggit'*) and *The Lord Of The Rings* (*'Bored Of The Rings'*), plus unique productions such as *The Colour Of Magic*, taken from the related Terry Pratchett book. This game, based on the noir film *The Big Sleep*, addresses the sleazy private-eye world of Sam Spillade. Laughs aplenty via quality gameplay.



THE DOOM TRILOGY – TOPOLOGIKA
Tolpologika produced adventures for the hardcore adventure gamer, presenting tough puzzles with a strictly text-only interface. Based on a science-fiction premise, the trilogy of related titles consisted of *Doom* (which was initially released and then, later, rewritten and expanded by about 50 per cent), *Return To Doom* and *Last Days Of Doom*. The trilogy of games were a worthy challenge for hardcore gamers.





company eventually did take the mercantile move, it chose suitably quirky targets. Radio 4's legendary soap opera *The Archers* (1985), author Sue Townsend's *The Secret Diary Of Adrian Mole Aged 13 ¾* (1985) and its sequel *The Growing Pains Of Adrian Mole* (1987), and, finally, *The Saga Of Erik The Viking* (1985), based on a book written by ex-Monty Python man Terry Jones

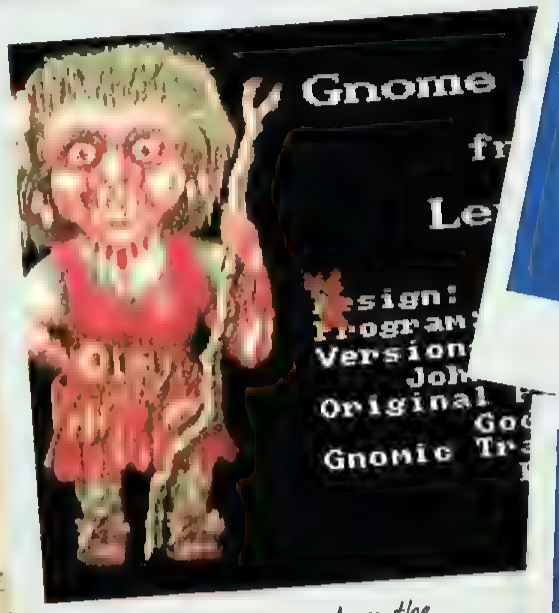
All except *The Saga Of Erik* temporarily dumped the complex parser for a multiple-choice-based system that formed a decision tree leading you into right or wrong decisions. A novelty, at the time the system imposed strict boundaries of gameplay freedom and, while they were generally well reviewed, they are seen, by Level 9 fans, as aberrations rather than as part of the Level 9 adventure 'canon'. *Erik*, on the other hand, is based on the classic adventure style, which is both entertaining and, knowing Jones for his love of history, educational, too. It is also not a straight rip-off of the book but a story extension – a nice touch

Science fiction was tweaked in *Lords Of Time* (1983), a time-travelling caper that became the first entry in the next trilogy, that later became known as *Time And Magik* (1988). This game reported progress of a different hue, as it was the first Level 9 title not to be designed by the brothers. The game's designer Sue Gazzard, a dedicated adventure fan, was writing programs for Level 9 just three months after buying her first BBC computer. "I've been known to stay up till 2am. I found adventures fired my imagination," she told *Micro Adventurer*. Sue took the design of *Lords Of Time* very seriously, burying herself in the library during the design stage, "so, a Roman village is based on a map of a real village and a Tudor house is a copy of a real house."

The trilogy was completed by two excellent titles, which returned to the fantasy theme *Red Moon* (1985) and *The Price Of Magik* (1986) (the company's final 8-bit only title). *Red Moon*, featuring over 200 locations, retained the company's high design standards and offered the player a purely magical theme combining a standard adventure design with a combat system based on hit points. The task was to seek out the Red Moon crystal, the source of all magic. Gameplay involved accumulating 12 spells and nine (there's that number again) pieces of treasure. For the 8-bit versions, the developed parser successfully supported the graphic engine. So, even though the graphics loaded comparatively quickly, you could speed up play further by typing in your next command as the new picture drew itself on screen

These titles showed the ongoing fight between the desire to produce literary texts and the market demands for graphics, which continued to be the Achilles heel of the company's products. For example, for the Spectrum 48K tape version, one side of the tape loaded the graphic version of the game and the other side offered the text-only version. Oddly, the latter proved to be the more desirable of the two, mainly because it provided more information, which often aided you in solving puzzles

Addressing the newly burgeoning 16-bit market, featuring the Commodore Amiga, Atari ST and the PC, Level 9 decided that a break had to be made with its old 8-bit development system and its graphical direction. The result was KAOS, designed by John Jones-Steele (designer of *Colossal Adventure* and *Mordon's Quest* for Melbourne



Gnome ranger appeared on the Amiga, but wasn't nearly as successful as level 9's earlier adventures.

Rainbird published level 9's later releases.

"LEVEL 9 WAS RESTRICTED IN HOW MUCH MEMORY IT WAS ABLE TO PLAY WITH"

House), a grand, character oriented and driven system that may have had its roots in Level 9's abortive attempt at producing a multi-user dungeon game called *Avalon*. The new game engine allowed you to give orders to characters in order to solve complex puzzles. Teaming up with Telecomsoft's Rainbird label, *Knight Orc* (1987) was born. Playing the role of an orc you had to escape from the repressive world you live in. The game was a great success being full of ambience with some genuinely funny textual situations. The new graphic style was divisive, however. Definitely an improvement, the updated, yet washed out' style was simultaneously loved and hated with a similar passion.

Humour and fantasy remained on the agenda with two games featuring Ingrid the Sloane Gnome. In *Gnome Ranger* (1987) and *Ingrid's Back* (1988), Level 9's first game for Mandarin Software, you play the part of Ingrid, experiencing her adventures after she's been kicked out of her village and later having to thwart a land developer to save that very same village. Utilising a modified KAOS system for *Ingrid's Back*, the wandering game characters were better controlled utilising a racetrack system and the locations, while few in number, were more detailed.

Lancelot (1988) plunged the gamer into the Arthurian legends in which you had to find the Grail but rescue a few knights and damsels in the process. Featuring a refined game engine, *Lancelot*'s gameplay depended on a variety of character-based puzzles and included a detailed world, in which just about everything can be examined.

The company's final game *Scapeghost* (1989), known for a time in development as *Spook*, sees you as an ex-undercover copper and ex-human. Playing a ghost, it's your task to clear your name as you're blamed for tipping off a drugs gang before they were snatched. A fitting finale to the Level 9 library, *Scapeghost* was well written, with suitably moody tones, plenty of puzzles that require lateral thinking and the best set of graphics the company had ever produced.

Level 9 ended its career dumping the adventure game genre entirely because of a perceived lack of interest and then moved into more graphical, action-oriented fare. However, it never found success and, during the early Nineties, the team split and went their separate ways. A sad end to a great team who produced a superb series of adventure games.

Looking back over the company's history, whatever the benefits of the inherent coding system, it is true that Level 9 was hampered by the UK computer market because it was largely dominated by two tape-based 8-bit computers – the Spectrum and the C64 – in those early days, the C64's tape option was very popular in the UK. Consequently Level 9 was severely restricted in how much memory it was able to play with. The American-based Infocom, Level 9's main competition, by contrast, based its coding system on the popular and more expensive disk systems supported by the Apple II, Commodore 64 and the Atari XL plus the early version of the PC. This meant that Infocom could produce games using a disk-based virtual memory arrangement, which extended the memory bounds enormously allowing the American company to build its own text library on a more literary foundation along with more fluid game designs. Any critic of a Level 9 game should bear those facts in mind. It is interesting to muse, however, that we probably never saw the best of the Level 9 team. Free from the tape-based stricture and blessed with a virtual disk system from the off, the Austin brothers may, with years of development in front of them, have produced similar, if not superior, works of art of the type often attributable to Infocom.

The UK derived technical restrictions do, in fact, reflect more praise and glory on to the British outfit, who, at least in terms of compression techniques, was technically superior to its American neighbour. As such Level 9 was, undoubtedly, responsible for the most technically advanced tape-based adventures the world had ever seen.

TEN KEY FACTS

1: The company was founded in 1981.
2: Level 9's first game was produced for the kit computer, the Nascom.
3: A-code, the in-house interpreter, was even more efficient than raw Z80 assembler.
4: The KAOS game engine stands for Knight Orc Adventure System.
5: The text for *The Archers* game was completed by the radio series' writers.
6: *Scapeghost* writer Sandra Sharkey founded and was the first editor of the popular adventure fanzine *Adventure Probe*.
7: The Lenslok security contrivance utilised on some of Level 9's earlier games was the most hated anti-piracy device ever devised.
8: Level 9 reportedly split with Rainbird because it felt the company was favouring adventure label mate Magnetic Scrolls, in marketing terms.
9: *Knight Orc*'s graphics were digitised paintings.
10: *Gnome Ranger 3* was apparently fully designed and ready to be coded but never actually appeared.

THE CLASSIC GAME

PLANESCAPE TORMENT

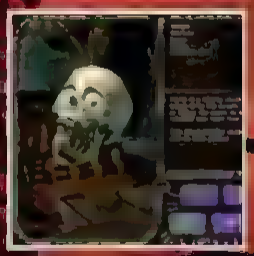
After a great run in the Eighties and early-Nineties, PC role-playing games practically vanished off the shelves and it seemed as though all attention was destined to be on the likes of *Doom*, *Quake* and *Duke Nukem*.

The Gold Box *Dungeons & Dragons* games had all but disappeared. *Ultima* titles were few and far between, and *Might & Magic* had long since lost its edge. Then along came relatively unknown developers Black Isle and BioWare, who unleashed *Fallout* and *Baldur's Gate* on to the world. These titles reinvigorated the stale RPG market and paved the way for Black Isle's next masterpiece, *Planescape: Torment*.

A role-playing literary work of art, *Torment* brought together an intricate and well-crafted plot, deep, memorable characters and a host of brilliantly designed locations, all of which resulted in arguably the greatest RPG of 1999. Craig Ritchie looks back on this epic adventure and reveals a handful of the reasons why this truly is a classic game.

The Nameless One

Your character. Exactly where he comes from and what his true history throughout the Planes is depends in part on your actions and choices throughout the game. He starts as a fighter, but can train as either a thief or mage.



Morte

Your sidekick, Morte is a floating skull. With you from the start, Morte is your first companion, but not the most loyal. Just why do you tattoo 'Don't trust the skull' to your lower back? Also, if he's just a floating head, where does he keep all his inventory items?

Annah

An attractive tiefling (if you look past the cockney accent and tail), Annah is a handy thief and not too shabby with the fist-knives. At first reluctant to join your party, if you play your cards right you could find yourself in for a neck-biting furve session...

Dak'kon

A solid fighter/mage, Dak'kon is a great asset. He wields a Karach blade, a weapon revered for gaining abilities along with its owner's skills. Furthermore, Dak'kon offers great insights into the arcane arts if the Nameless One becomes a magic user.

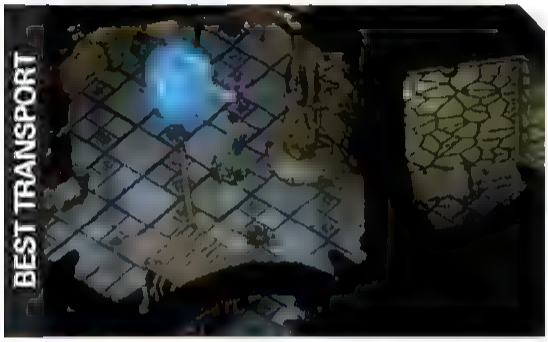
MEMORABLE MOMENTS

Fallout + Baldur's Gate = Brilliant

Script, characters, storyline, dialogue, plot twists – are you noticing a common thread here? *Planescape: Torment* is regarded by many devoted fans as having the best writing of any RPG – ever. There are over 800,000 words in this game (to be fair, some are journal entries and quest logs) and the quality throughout is truly worthy of literary praise. Take the best of what made *Fallout* so great, add to it the new features of *Baldur's Gate*'s Infinity engine and then throw in the official *Dungeons & Dragons Planescape* campaign setting, mix in varied characters plus a wealth of sub-quests, and how could you not have a classic for RPG fans?

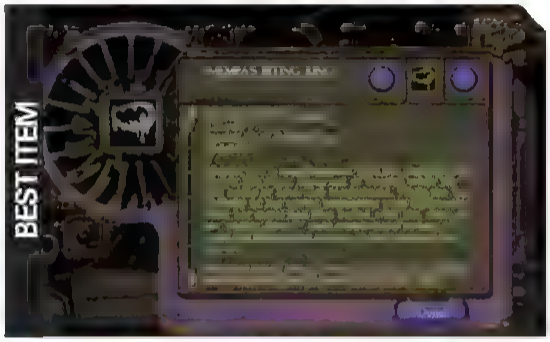
Light my fire

Even in a game as richly populated as *Torment*, the flaming mage Ignus stands out. Some way into the game, you're able to free his body from the Smouldering Corpse tavern, at which point he joins your party as the resident Fire Mage. Your conversations with him then reveal possibly the greatest backstory in the game, and Ignus can offer some awesome buffs and spells to your main character – at the cost of a few of your maximum hit points. He was well-scripted and genuinely added a great deal to the overall experience of the game. And besides, how many RPG characters do you know that have a pub named after them?



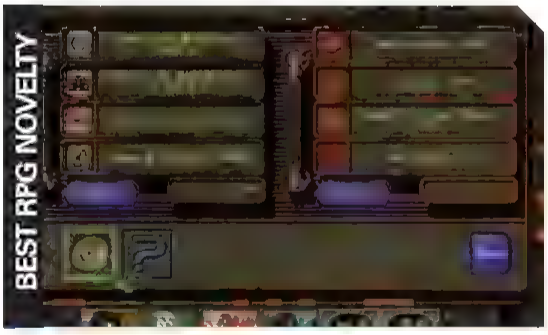
Portal in a storm

Another wonderful innovation in *Planescape: Torment* was the idea of magical portals that are triggered by... well, just about anything. It could be that you were carrying a certain item in the right location, or making a specific sound in the right place, or holding your fingers 'just so' while walking under an archway, or any multitude of seemingly random events, and you would find that you had discovered a key to a portal that could whisk you off to other areas of the giant city of Sigil, maybe send you to a long-lost tomb deep underground – or to entirely different planes of existence altogether.



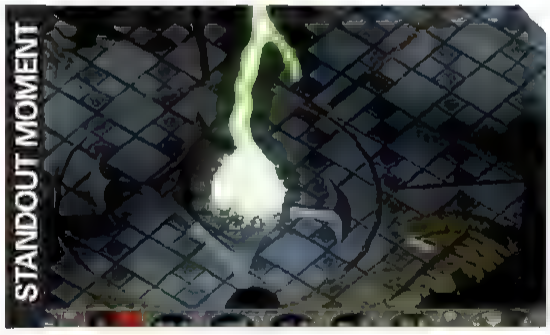
I have a bone to pick (off)

Possibly the most novel item in the game is Mempa's Biting Ring. This magical little band of silver is obtained by letting the enticingly named Marrow-friend in Ragpicker's Square take a bite out of you instead of eating the dismembered finger hanging from his neck (yes, really). Once you have said finger in your possession, you can proceed to bite off your own finger so as to stick on your newly acquired treasure, and enjoy the benefits of a permanent +2 to your armour class. The only catch is that the ring is cursed, and as a result, once attached it cannot be removed – unless the finger comes with it.



Take this +2 Tattoo

In a departure from the RPG standards for buffing out your character, *Planescape: Torment* saw your stats, THAC0, armour class bonuses and the like affected by numerous tattoos found in the game. Fell's Tattoo Parlor was the place to go, where the Dabus – who communicate via arcane symbols above their heads – in question could sort you out with all the designs you needed. Completing certain quests, choosing the correct conversation options or finding specific items unlocked more tattoos, and by the end you could find yourself adorned by such gems as the Tattoo of Bloodletting and the Tattoo of Death-In-Life.



Death becomes you

Unlike almost every other game out there, where the avoidance of death is often the main goal, *Planescape: Torment* sees you having to die to complete some quests. One of the more tricky areas of the game, the tomb of the Nameless One, sees you struck down by magical forces when you walk over the Symbol of Torment, and then reappear elsewhere in the tomb so as to be able to collect all the necessary items for that area. This could be frustrating, as most gamers take a while to realise 'oh, I'm meant to die there', but once this was completed, it went down as one of the most memorable and unique aspects of the game.

What web sites said... ages ago

Gamespot 8.9

"It's clearly the best traditional computer role-playing game of the year and is bound to be an all-time favourite for many of its inevitable fans."

GameOver, 94%

"*Planescape: Torment* is yet another astounding title out the doors of the Black Isle factory, and is well worth your jink, as Planescapers would say."

What we think

Do we agree? Absolutely! The 640x480 resolution can now be enhanced thanks to a widescreen patch from www.gibberlings3.net, and PC gamers who missed this should definitely pick it up. The depth, the story, the characters and the entire world are still massively engrossing and definitely worth exploring.

IN THE KNOW

PLATFORM: PC
DEVELOPER: BLACK ISLE
PUBLISHER: INTERPLAY
RELEASED: 1999
GENRE: RPG
EXPECT TO PAY: £5+

THE ULTIMATE ADVENTURE OF SIR ARTHUR PENDRAGON

THE SPECTRUM HAD SABREMAN, ULTIMATE'S INTREPID ADVENTURER AND STAR OF FOUR CLASSIC GAMES, WHILE THE COMMODORE 64 HAD ITS OWN ULTIMATE HERO IN THE SLIGHTLY ODD SHAPE OF SIR ARTHUR PENDRAGON. SABREMAN WAS CREATED BY COMPANY FOUNDERS CHRIS AND TIM STAMPER, BUT WHO WAS BEHIND THE PENDRAGON GAMES? FOR THE FIRST TIME EVER, MARTYN CARROLL REVEALS THE MEN RESPONSIBLE AND FINDS OUT HOW THEY ENDED UP CREATING GAMES FOR THE UK'S MOST REVERED SOFTWARE HOUSE

» Dave Thomas, the hitherto unknown author of the Sir Arthur Pendragon games.

» The 1962 fantasy film *Jack The Giant Killer* was an obvious influence on *Kamath*. Compare the castle from the film to the game's loading screen.

» [C64] Dave's first game was the incredibly tough shooter *Warlok*. "It was basically a rip-off of *Scramble*, which I'd seen in the arcades and loved playing," he says.

» [C64] Just how do you get past that Day-Glo vampire blocking the door? The first of *Kamath*'s many devious puzzles.

Trying to uncover any inside information about Ultimate Play The Game is on a par with completing *Sabre Wulf* without losing a life. Basically you've got no hope. Such is the level of secrecy surrounding the developer that we'd swear that former employees signed gagging contracts under the threat of death by blunt spoon. No one is willing to talk, even now, more than 20 years after Ultimate became Rare and began to concentrate on console software. Questions such as what happened to *Mire Mare*, was *Knight Lore* really completed before *Sabre Wulf*, and who authored the later games like *Martianoids* and *Bubbler*, look set to remain unanswered.

The authorship of the six original Ultimate games for the C64 is also a mystery as none of the games carry credits. A breakthrough came in 2001 when a programmer named Manuel Caballero contacted the Ultimate Wurlde website (www.ultimate-wurlde.com) and revealed that he was the author of *Imhotep*. But who was behind *The Staff Of Kamath* and the other adventures starring Sir Arthur Pendragon? Fortunately the guilty parties left behind a small clue. If you managed to complete *Dragonskulle*, the fourth and final game, you'd find the following message: "This concludes the Pendragon adventure series, we hope you have enjoyed playing them, DT and RET 1985." Just who did these initials belong to? They didn't match up to any of the known Ultimate employees at the time.

The mystery was solved by Frank Gasking of Games That Weren't 64 (http://gtw64.retro-net.de) who noticed that the music to *Buggy Boy* on the C64 sounded similar to the *Dragonskulle* theme tune. And *Buggy Boy* was programmed by Dave Thomas with graphics by Robert (Bob) Thomas. The initials matched and it only took a few emails to track Dave down and receive confirmation that he and his brother Bob were indeed behind the Pendragon games. Better still, Dave did not fear death by spoon and was happy to be interviewed – even if he was slightly surprised by our interest.

"To be honest, I had no idea anyone was in the slightest bit interested in knowing that Bob and I were responsible for the Pendragon games," says Dave, when asked why he hadn't come forward before now. "This was 20-odd years ago and is ancient history as far as I'm concerned."

The story actually begins closer to 30 years ago, when Dave was studying computer sciences at college in Cheltenham in the early Eighties. "It was around this time that the ZX80 was announced and I decided it would be very useful to aid my college studies so my parents bought me one," he remembers. "When it finally arrived I thought the thing was

"WE HAD A LOT OF FUN DOING THE PENDRAGON ADVENTURES AND FOUND THE STAMPERS TO BE GREAT TO WORK FOR. WE HAD A HUGE AMOUNT OF RESPECT FOR THEM AND THEY WERE ALWAYS VERY GENEROUS AND WARM PEOPLE" DAVE THOMAS

so dreadful I sent it back!" The unfortunate ZX80 was soon replaced by a more appealing Acorn Atom that older brother Bob stumped up the cash for. "It was on this system that I learned to code. Although I didn't get around to writing any games on the machine, it was instrumental in giving me a start in the career I've had to this day."

That career was kick-started in 1983 when Dave upgraded to a more advanced 6502 machine, the Atari 400, and created his first game. It was called *Warlok* and while it was a clear rip-off of Konami's *Scramble*, it would bag him a most unexpected windfall. "I discovered that a company called Calisto Software was running a competition to find the best original game and the winner would receive a cheque for £5,000. I decided to enter Warlok and a few weeks later was announced as the winner. I remember travelling to a swanky club in London's Grosvenor Square and receiving the cheque from Dave Lee Travis!"

In addition to a nice fat cheque, Birmingham-based Calisto offered Dave a particularly jammy job, which saw him travelling to America. "Calisto had some kind of tie-in with Adventure International and its founder Scott Adams was looking for someone to convert one of his adventure games to the new Commodore 64. Calisto flew myself and another coder out to Orlando and we stayed with Scott and his family for around a month to complete the project. I honestly can't remember the name of the game we ported! On my return, I was told that the C64 was selling incredibly well in the UK and it would be worth converting my original Atari version of *Warlok* to it. I spent the next few weeks doing the conversion and hence my first C64 title was born."

Dave worked for Calisto for a while but he soon got fed up with the daily commute from his home in Cheltenham to Calisto's offices in Birmingham. "I decided to go back to developing games for myself," he says, and with his C64 skills sufficiently honed, he began to piece together the game that would become *The Staff Of Karnath*. "I'd had an idea in my mind about creating a pseudo-3D adventure game set in a castle which used a fixed perspective as though you were looking into a doll's house. I did some preliminary work on the engine for it and created the main character but my graphical skills at the time didn't extend to building the castle. However, my brother Bob was a trained technical illustrator working for a local company that subcontracted work from the MOD. He'd frequently bring work home and I'd see him working on drawing up the insides of some missile or submarine on his drawing board. So he helped out with creating the castle rooms. We'd both seen an old film called *Jack The Giant Killer* and that influenced a lot of the visuals, especially the castle itself. I was also reading a lot of HP Lovecraft at the time and that had a bearing on the storyline of the game and the title, *The Staff Of Karnath*."

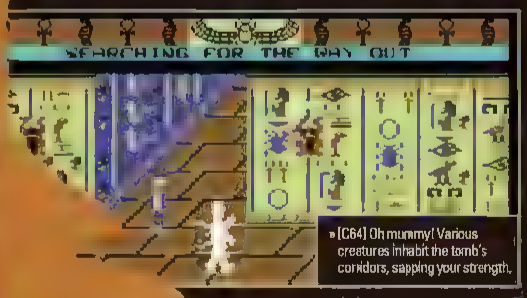
Taking control of Sir Arthur Pendragon (the adventurer's name was borrowed from the Black Prince Pendragon, the evil wizard from *Jack The Giant Killer*), the player had to explore the creepy castle and collect 16 pieces of a magical pentagram while avoiding various energy-sapping nasties. But it wasn't just a case of using quick reflexes to grab the piece before you got zapped, as in most cases you had to solve a tricky puzzle to make the piece appear in the first place. These cerebral elements were drawn from Dave's work for Adventure International. "The AI games were purely text with static images and we wanted to create something that was more visually tangible so you could actually see the result of moving the stone' or 'throwing the lever'."

As the game approached completion, the brothers started to consider potential publishers and they were thinking big. Bigger than Calisto at least. "We thought about showing it to Ultimate but never really dreamt that the Stampers would be interested, given their almost legendary status even then. We

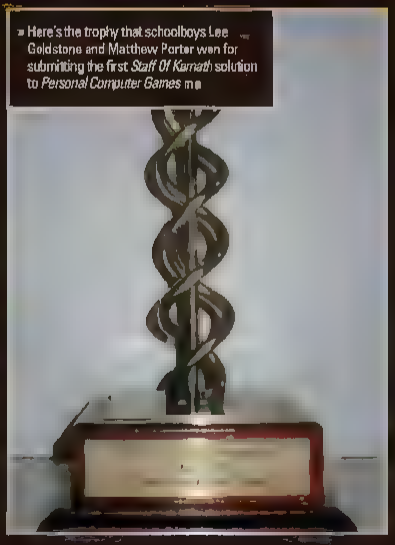
LONE RIDER

it the Thomas brothers created the Pendragon games, and Manuel Cabal ero wrote *Inthoteo*, that leaves one of Ultimate s C64 games outstanding Who was responsible for the arcade shooter *Outlaws*? Hang on a second those chunky character spr tes sure look famil ar .

Owning up to this Western-themed misfire, Dave reveals how it came about "Around the time that *Dragonskulle* was f nished, Bob and were asked f we'd like to knock out another quick game that was to be released around Christmas 1985 We were both into the old Clint Eastwood 'Man With No Name' Spaghetti Westerns so we decided to do something relatively simple based around a one rider freeing some poor hapless people from a gang of vicious outlaws – another highly original concept! It on y took two or three weeks a nd it didn t sell very wel as remember but it was q ick and easy money."



» [C64] Oh mummy! Various creatures inhabit the tomb's corridors, sapping your strength.



» Here's the trophy that schoolboys Lee Goldstone and Matthew Porter won for submitting the first *Staff Of Karnath* solution to *Personal Computer Games* ma

» [C64] In *Blackwyche*, Sir Arthur ditches his sports casual clothing for a dubious-looking cape. He also appears to be sporting a full and hearty moustache!

IF YOU PLAY ONE ARTHUR PENDRAGON GAME...

PLAY THIS...

ENTOMBED

Sir Arthur's Egyptian adventure is the best of the bunch and should be the first port of call for any doubting fans that believe that Ultimate only wrote great games for the Speccy. Just don't forget to grab a map before you begin otherwise you'll be bumbling around the first level for hours.

"MY BROTHER AND I WERE A BIT EMBARRASSED TO SHOW [TIM STAMPER] IN AS WE WERE BOTH WORKING IN OUR PARENTS' ATTIC AT THE TIME. WE NEEDN'T HAVE BEEN THOUGH AS IT LATER TURNED OUT THAT TIM AND HIS BROTHER CHRIS WERE WORKING FROM THEIR PARENTS' ATTIC TOO"

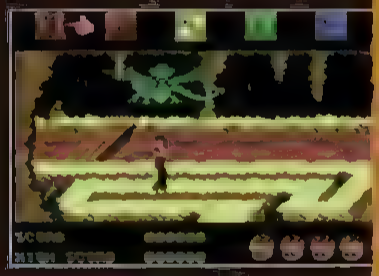
DAVE THOMAS

really thought *Kamath* looked very nice and might be something they'd be interested in, though we were under no illusions that what we had created was of the same quality and general slickness of Ultimate's Spectrum games. We had nothing to lose so we gave it a shot. We rang Ultimate and Tim Stamper arranged to come down and see the game. The following day a Porsche 911 Turbo turned up outside the door with Tim and his then-fiancée Carole Ward inside. My brother and I were a bit embarrassed to show them in as we were both working in our parents' attic at the time. We needn't have been though as it later turned out that Tim and his brother Chris were working from their parents' attic too! Tim was impressed with the game and immediately offered us a deal to produce a series of four Arthur Pendragon games on the spot."

The deal was done and Bob decided to jack in his job and join his brother in a partnership to produce the games for Ultimate – Bob created the graphics while Dave wrote the code. Despite being well-known perfectionists, the Stampers did not request any changes to *Kamath*. "They very much left it up to us to complete the game how we wanted to," says Dave. "I don't remember any interference from them on any level. We just handed the game over when it was complete, it was given a bit of QA and then released." The only stipulation was that their names were not revealed. "The Stampers didn't allow anyone to get credits on any of the original games they produced. This was strictly part of the deal and at the time we were so pleased to have got the deal we didn't really care. It did become a source of frustration later on in the series, hence why I sneaked those initials onto the last game."

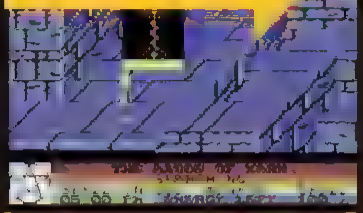
The Staff Of Kamath debuted on the C64 in December 1984 and was a solid hit, selling more than 40,000 copies on its initial release. It also received excellent reviews from the magazines of the day, with *Personal Computer Games* awarding it a rating of 9/10, and calling it "a beautiful game that more than lives up to expectations". Work on the sequels started immediately and all three followed within 12 months of the original. The first, *Entombed*, saw Sir Arthur trapped inside a doom-filled temple – and he was even given a whip to complete the Indiana Jones homage. "*Entombed* took the longest to create as I decided to re-code the original *Kamath* engine to allow for a much bigger area to explore. This was subsequently used in *Blackwyche* and *Dragonskulle*."

Blackwyche took place on a ghostly galleon, which was inspired by the HMS Victory moored in Portsmouth. "We'd seen it featured on TV and decided that a ship would be a good place for the third adventure. Bob and I went down to Portsmouth and had a good look around the ship, taking lots



» As with all early Ultimate games, the memorable cover art was drawn by Tim Stamper. He based the images on the rough plot outlines provided by Dave.

REMEMBER WHEN...



YOU FINALLY DESTROYED THE STAFF OF KARNATH?

Having collected all 16 pieces of the pentagram, you'd negotiate the castle crypt one last time and blast that bothersome staff with your Menhir spell. Cue flashing colours and whizzing sounds and a rather lacklustre 'congratulations' message that could not dampen the warm glow of satisfaction.

of photographs that we could use to base some of the graphics on." *Dragonskulle*, the final game, transported Sir Arthur to a deadly island loosely based on Skull Island from *King Kong*. "We had loads of these sorts of films on tape," he says. "Anything fantasy, science fiction or horror really. We watched lots of stuff to get ideas for the puzzles and visuals in the games."

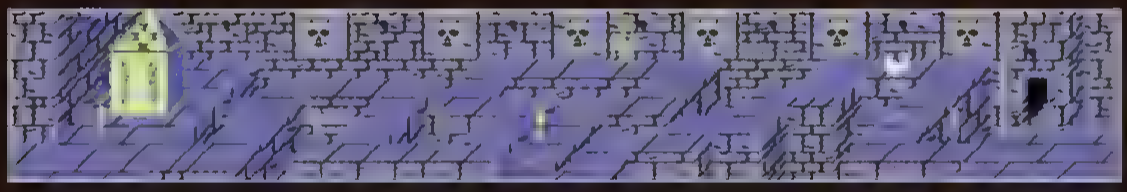
Released during summer 1985, *Entombed* was a critical hit, earning a 93% rating and a coveted Gold Medal award from *Zzap!64* magazine, but both *Blackwyche* and *Dragonskulle* were slated for being too similar to the previous games. "Given the great reviews that we had for *Entombed* we felt there was little point in changing the successful formula," admits Dave. "So we were very disappointed with the reviews for the later games. *Dragonskulle* in particular had dreadful reviews, which was a big surprise to all of us as both the Stampers and ourselves thought this was the best of the four adventures. Looking back now I can see why *Entombed* was generally considered to be the best entry. I have a great affinity with all things Egyptian and Egypt is a country I have visited many times. I think for this reason I probably had a lot more enthusiasm for creating *Entombed* than the others and that may have been reflected in the reviews."

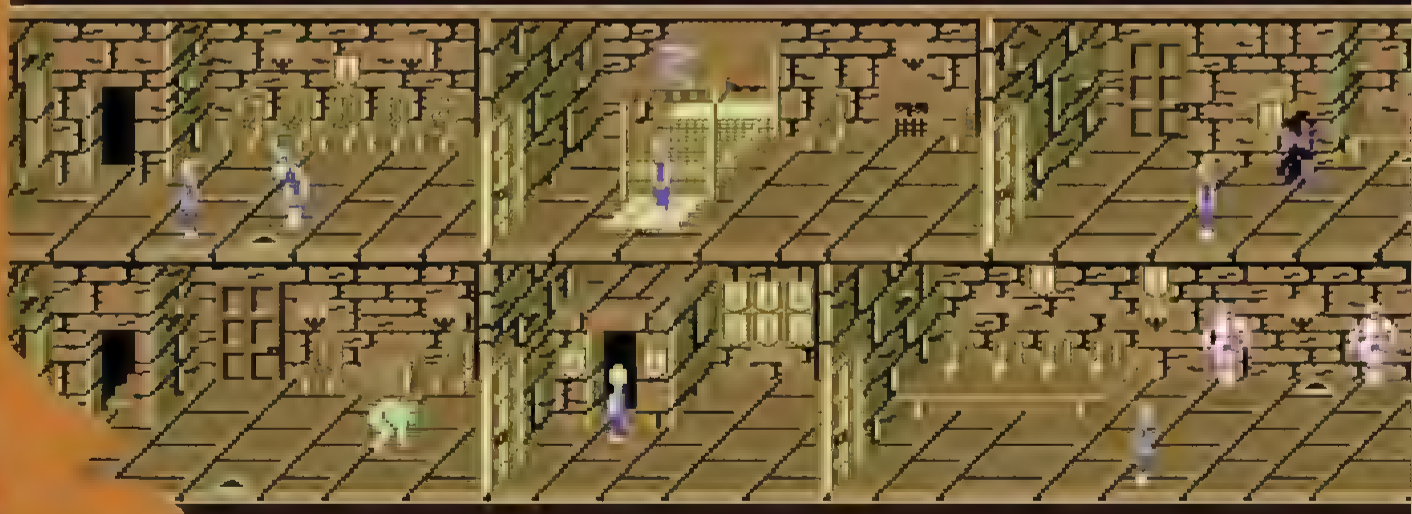
Sales tailed off too and in the end *Karnath* sold as many copies as the three sequels combined. This didn't bode well for the brothers as they received a cut of each copy sold rather than any advance payment. They did reap some rewards from *Karnath* but they weren't about to join Tim in the 911 Turbo club. "We certainly didn't earn the vast sums that were being bandied about at the time. I do remember buying my first car out of the initial royalty payment though – a Fiesta XR2 – so we were hardly into Porsche territory as you can tell!"

Following the release of *Dragonskulle*, the Stampers asked Dave and Bob if they wanted to develop games for their new target platform – the Nintendo Entertainment System. Over the next 18 months the pair sussed out the system and created various tech demos but nothing was given the green light. With no product there was no payment so they parted company with Ultimate. "We had a lot of fun doing the Pendragon adventures and found the Stampers to be great to work for during this time. We had a huge amount of respect for them and they were always very generous and warm people. This changed though when we moved onto the NES and we became increasingly frustrated with them. Who knows what we might have achieved had we been able to produce that initial NES game."

Undeterred, the pair retrained their sights on the Commodore 64. "We met up with Elite boss Steve Wilcox and he gave us *Buggy Boy*," says Dave. "I think this was a reluctant decision on his part as he felt that we'd been away from the Commodore 64 for so long that we may have 'lost touch'. Anyway, we got some excellent reviews when it was released and hence started our relationship with Elite."

Live And Let Die and *First Strike* followed, and while both were great games, it's the fantastic Commodore 64 version of *Buggy Boy* that they're best remembered for. Or at least it was, because now that the mystery has been solved and their story has been told we can finally credit Dave and Bob Thomas with creating the excellent adventures of Sir Arthur Pendragon. And with that, they've become part of the legend that is Ultimate. Play The Game.





» [C64] The exit to the tomb is located in the room where you begin. Unfortunately there's a bloody great statue blocking the way. Time to get *Entombed*

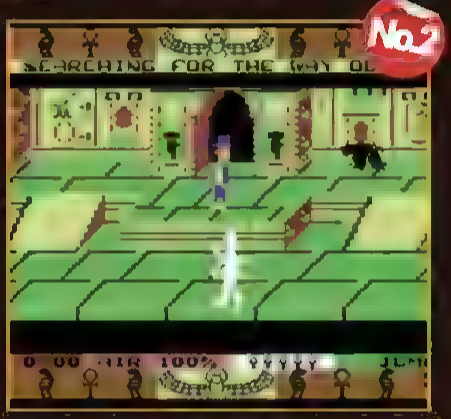
FAMILY TREE

THE STAFF OF KARNATH

Ultimate's C64 debut was eagerly anticipated and didn't disappoint. It looked fantastic for a start, with those slick pseudo-3D backgrounds splashed with dazzling colours and filled with chunky character sprites. The puzzles were difficult and ever so devious, which made solving them all the more rewarding. On the downside, having to deliver each piece of the pentagram to the altar led to lots of weary backtracking, and the random nature of Sir Arthur's many spells resulted in too much trial and error, but overall *Karnath* was an arcade adventure for C64 owners to treasure.

ENTOMBED

The sequel did everything that a decent follow-up should. It was much bigger – the tomb Sir Arthur had to escape from was spread over seven floors – and the gameplay was updated so there was less backtracking and the unwieldy spell system was replaced with a single weapon (a trusty whip). And thanks to the game's richly-detailed setting, the air-starved chambers and maze-like corridors that you had to explore were dripping with ambience. But make no mistake, it was a tough challenge and the puzzles were even more taxing than before. Perhaps a little too taxing.



BLACKWYCHE

If *Entombed* was a whip-cracking leap forward from *Karnath*, *Blackwyche* was more of a peg-legged shuffle to the side. And while it wasn't as bad as the scathing review in *Zzap!64* made out – the game scored 53% but it was just as polished and as playable as its 93%-scoring predecessor – there was a definite sense of déjà vu hanging over the proceedings. *Blackwyche* should be praised though for lowering the difficulty level. The puzzles were easier – and dare we say it, logical – meaning that more players could realistically complete the game without cheating.

DRAGONSKULLE

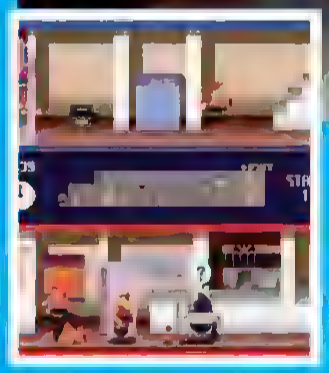
Being the fourth game in an increasingly similar series, *Dragonskulle* was overlooked by many. Which was a shame, as the final Pendragon adventure did at least introduce some fresh ideas. Instead of individual 'rooms' where you solved puzzles, the game featured a sprawling map with different types of rooms showing up again and again. In some you'd be blasting dragons, in others you'd be digging up graves, and so on. The emphasis was on exploring rather than puzzle solving, but getting lost in the series of similar-looking caves just wasn't that much fun.

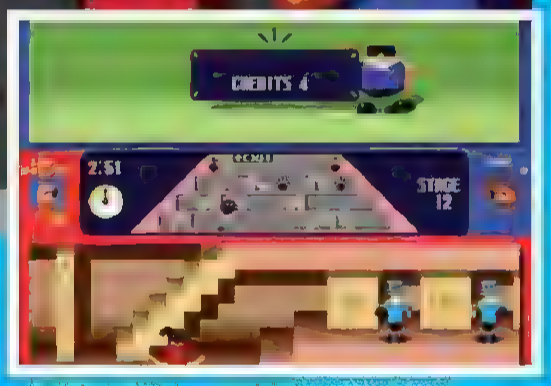
WHAT HAPPENED NEXT...

The working relationship between the Thomas's and the Stampers didn't end with the release of *Dragonskulle*. In the late-Eighties they returned to Ultimate (who'd since become Rare) and ported the arcade games *NARC* and *Arch Rivals* to the NES. They then moved to Ocean and worked on several more NES conversions. The final project they worked on as a partnership was the brilliantly titled but awful PC game *Guts N' Garters in DNA Danger* for Ocean. Following its release in 1997 Bob became a freelance web developer while Dave turned his hand to online and mobile games. His most recent release was *Crystal Quest*, an update of the arcade shooter that appeared on the Apple Mac in 1987.

BONANZA BROS.

FORGET GTA IV, SEGA WAS PUTTING US INTO THE SHOES OF BANK ROBBERS AS FAR BACK AS 1990. WE JOIN THE VIRTUAL EMBODIMENT OF THE KRAYS AND THE CHUCKLE BROTHERS AS THEY SECURE ONE HELL OF A BONANZA





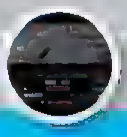
R

TIMELINE

KEYSTONE KAPERS
Version Featured: Intellivision
Year Released: 1983

MANIC MINER
Version Featured: Spectrum
Year Released: 1983

BLAGGER
Version Featured: CPC
Year Released: 1983



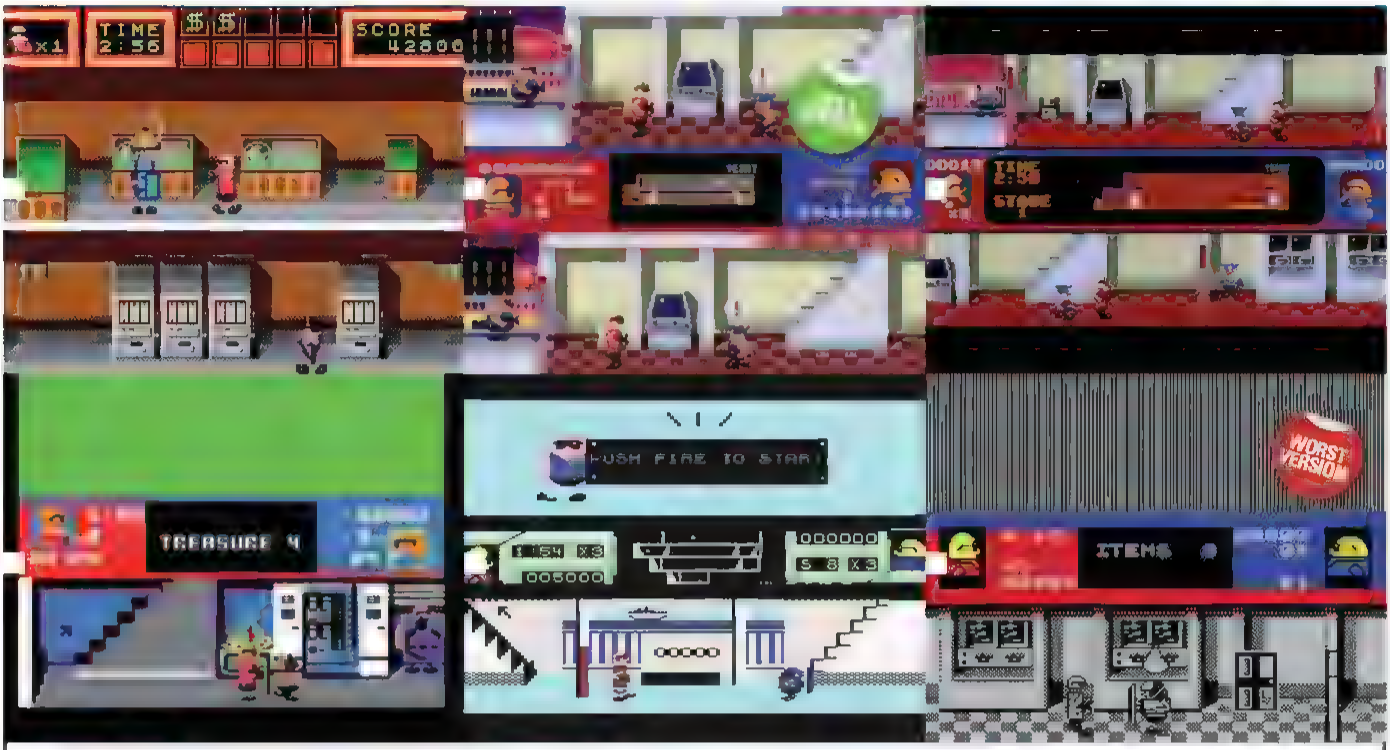
SON OF BLAGGER
Version Featured: C64
Year Released: 1983

PUZZLE & ACTION TANT-R
Version Featured: Arcade
Year Released: 1992

PUZZLE & ACTION ICHIDANT R
Version Featured: Arcade
Year Released: 1994

GRAND THEFT AUTO IV
Version Featured: 360
Year Released: 2008

THE CONVERSIONS



1. MASTER SYSTEM
Like the Mega Drive port you can set your lives and time limit. The SMS version is the only one that doesn't show Robo and Mobo escaping and you only get a quick look at the map before the start of each stage. On all the 8-bit ports you don't drop your loot when you take a hit, which proves pretty helpful.

2. MEGA DRIVE
It may not have the aesthetics of the arcade game, but this is still a pretty faithful port. The MD game keeps the in-game map in game and the level layouts seem pretty on the money. Both SMS and MD ports play around with the backstory once again. This time our heroes are trying to take down some counterfeiters.

3. AMIGA
The Amiga version looks and plays similarly to the Mega Drive's. The map is visible, Mobo and Robo drop their haul whenever they get hit, and all the enemies, objects, colours and cut-scenes seem to have been wholesaled across, too. It's a great conversion that sits a respectable second place on this list.

4. CPC
The CPC version of *Bonanza Bros.* isn't bad. Marred by the same inaccurate controls that spoil the Speccy port, what this version does have is the gorgeous CPC colour palette, which lends a nice level of detail to the sprites. This added definition makes the game prettier, and escalates it slightly above the Speccy version.

5. C64
The C64 port of *Bonanza Bros.* is a marriage of the CPC's colourful sprites and the Spectrum's smooth scrolling. However, the C64 version doesn't find your characters jumping wildly in the air, and their progress is charted on an in-game map – making things a lot easier. Sadly, the C64 port is stupidly easy, too.

6. SPECTRUM
Apart from the annoying controls, this isn't bad. The action is smooth and the character sprites are well drawn, but they're sometimes hard to distinguish against the grey backgrounds. While scaled down a bit, the levels do keep the coin-op arrangement – which is good, as there are no maps in this version.

logically as a team. Using the maps to methodically negotiate your way around the levels and collecting the valuables quickly, with as little confrontation from the patrolling guards, is the key to a rising unlawful-rank.

The game also has a number of neat little features. Occasionally the guards can be seen dozing, meaning our antiheroes would need to tread carefully and keep a beady eye out for comedy rakes and precariously positioned cans that, if touched, would cause them to land on the ground with a thump or get smacked in the face with a clap. It's handy then that as well as stealth and sneakiness, Mobo and Robo also have the ability to stun the guards with funnel-shaped handguns so they can walk past them unperturbed.

Sega also permeated the robbery by adding neat bonus stages that found Mobo and Robo collecting gold bars, while avoiding the exposure of prowling spotlights. Failure to clean the screen of all the loot before getting captured inside the incandescent glare of the lights resulted in the duo getting a very graphic billy-club-pummelling by the game's overly aggressive security guards.

While there was only really one official *Bonanza Bros.* caper, the brothers would later receive two odd puzzle arcade spin-offs: *Puzzle & Action: Tant-R* and *Puzzle & Action: Ichidant-R*. Oddly, the theme of the games took on a weird *Sherlock Holmes* and Medieval mixture, and the sub-games played out similarly to the kind of analytical teasers seen in the *Brain Training* series. So, while the Bonanza Brothers may not have escalated to mascot-type stature, or gained huge critical acclaim for Sega, they did manage to keep their noses clean when putting their names to videogames. If you've yet to experience this criminally underplayed Sega classic then you really should try to track it down. Beg, cheat or steal a copy (we're joking of course).

THINGS TO LOOK OUT FOR

CANS
Look out for obstructions on the floor. If Mobo or Robo walk over them it usually results in the lazy guards being alerted.

LOOT
The treasures vary from level to level. One minute you're collecting gold, the next you're lifting a nice yellow sweatshirt.

GUARDS
There are a few variations of guards, but these blue armed guards are the most common enemy.

MAP
The map is your friend. It doesn't show you where the guards are, but it shows you where the loot and exit can be found.

TRY THIS NEXT

KEYSTONE KAPERS
Owing to an uncanny visual likeness, it wouldn't be completely idiotic to say that *Bonanza Bros.* could be seen as a spiritual predecessor to *Keystone Kapers*. Activision's game, however, finds you very much on the right side of the law. Placing you in the role of officer Keystone Kelly, you're tasked with trying to apprehend an escaping perp inside a multi-level shopping mall. Rather than collecting and escaping, *Keystone* finds you avoiding obstructions and trying to capture the absconding convict before he reaches the rooftops and makes his escape. Think *Chase H.Q.* set in Bluewater Shopping Centre.

The History Of SHINING

FORCE

RECOUNTING THE HISTORY OF AN RPG SERIES IS HARD ENOUGH, BUT WHAT IF THAT SERIES WAS PRODUCED BY MULTIPLE DEVELOPERS AND SPANNED VARIOUS GAMEPLAY STYLES. TRY TO KEEP UP AS **ASHLEY DAY** ATTEMPTS TO EXPLAIN THE HISTORY OF SEGA'S SHINING FORCE SERIES...

It's hard to imagine now, but there was actually a time when videogame RPGs were not synonymous with the Japanese *Final Fantasy* series. Most of the Eighties were dominated by American-produced *Dungeon & Dragons* clones and though Squaresoft had created a number of *FF* games during the latter half of the decade, their reach did not extend to the US until 1990 and the series was practically unknown in Europe before 1997.

It could be argued then that the early Nineties were something of a gold rush period for Japanese RPG developers. Whichever publisher got its games to Western shores first would surely take the lion's share of the market. Of course, they'd have to compete with well-established Western brands like Ultima and Wizardry, but if they could create something slightly different, then there's no reason why they couldn't compete favourably. This is what Sega did with its first *Shining* title, the Mega Drive's *Shining In The Darkness*, released in the US in March 1991 and brought to Europe in July of the same year.

Unlike later games in the series, *Shining In The Darkness* was a first-person perspective dungeon crawler, albeit one that introduced many of the stylistic elements and world rules that would define its upcoming, and better known, sequel, *Shining Force*.

Quite why Sega chose to start its *Shining* series with a dungeon crawler rather than the strategic gameplay it is now more famous for remains a mystery, but the idea was certainly a smart move in hindsight. First person perspective RPGs were very popular in both the US and Europe at the time thanks to the success of *Dungeon Master* (1987) and *Eye Of The Beholder* (1990), both of which wowed computer users with their impressive 3D views, creating a sense that you actually existed in the world you were exploring. Such experiences were few and far between for console owners, however. The latter two titles were eventually ported to the SNES, but very late on, in 1991 and 1994 respectively. The Mega Drive received

ROGUE'S GALLERY

ARMED SKELETON
Shining Force
1992

BARBARA
Shining Force CD
1994

CHAOS DRAGON
Shining Force II
1993

DANTOM
Shining Force CD
1994

BOWRIDER
Shining Force
1992

DEATH BALLOON
Shining Force CD
1994

EDMOND
Shining Force CD
1994

DARK SMOKE
Shining Force II
1993

IOM
Shining Force CD
1994

DARKSOL
Shining Force
1992

SOLO
Shining Force CD
1994

EVIL BEAST
Shining Force II
1993

BAZOO
Shining Force CD
1994

GOLEM
Shining Force
1992

DEAD WOLDOL
Shining Force CD
1994

ODD EYE
Shining Force II
1993

DEMON MASTER
Shining Force CD
1994

YASHA
Shining Force III
1997

GORDON
Shining Force CD
1994

LASER EYE
Shining Force
1992

MAGICAL MUSHROOM
Shining Force CD
1994

COLOSSUS
Shining Force III
1997

REAPER
Shining Force II
1993

WARDERER
Shining Force CD
1994

GALM
Shining Force III
1997

ZOMBIE
Shining Force
1992

BISHOP
Shining Force CD
1994

ZEON
Shining Force II
1993

SPIRIEL
Shining Force III
1997

DEADLY BORN
Shining Force CD
1994

DRAGONEWT
Shining Force CD
1994

FIALE
Shining Force III
1997

CYCLOPS
Shining Force II
1993

HAWKMAN
Shining Force CD
1994

CHIMAERA
Shining Force
1992

ARRAWNT
Shining Force III
1997

SKULL KNIGHT
Shining Force CD
1994

OCTOPUS
Shining Force III
1997

DEVIL GRIFFIN
Shining Force II
1993

DARK DRAGON
Shining Force
1992

WOLDOL
Shining Force CD
1994

HYDRA
Shining Force II
1993

ICE WORM
Shining Force
1992

ORC
Shining Force II
1993

MINOTAUR
Shining Force
1992

SHAMAN
Shining Force II
1993

BLUE DRAGON
Shining Force
1992

VANDAL
Shining Force III
1997

DARK BISHOP
Shining Force II
1993

DARK DWARF
Shining Force
1992

SAND WORM
Shining Force III
1997

DURAHAN
Shining Force
1992

KRAKEN
Shining Force II
1993

KANE
Shining Force
1992

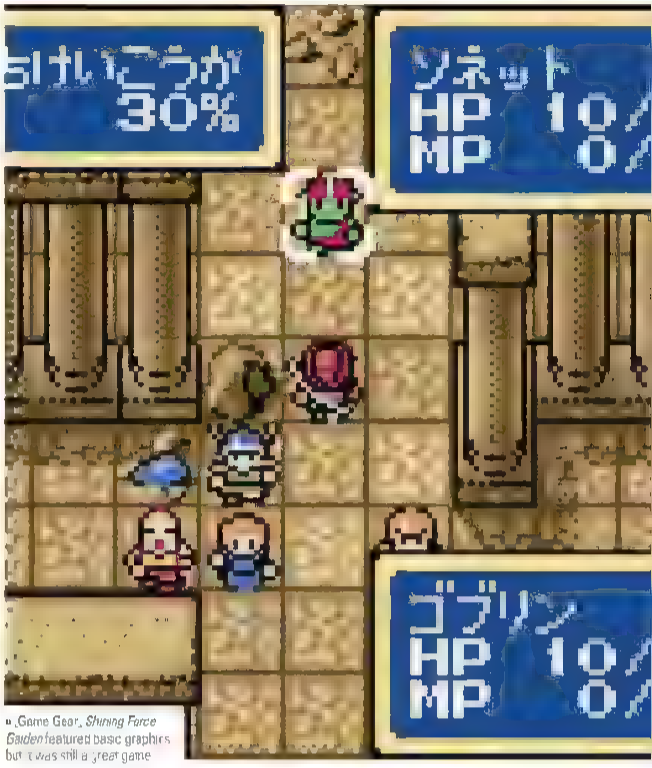
MASKED MONK
Shining Force III
1997

RAT
Shining Force II
1993

TORCH EYE
Shining Force
1992

DESSHEREN
Shining Force III
1997

TAROS
Shining Force II
1993



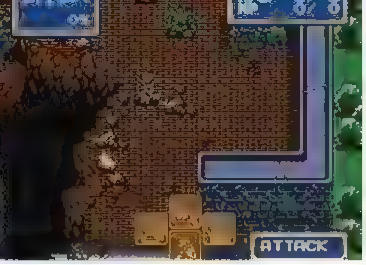
In Game Gear, *Shining Force Gaiden* featured basic graphics but it was still a great game

neither game, which made the existence of *Shining In The Darkness* very attractive indeed for RPG loving Sega fans.

Shining In The Darkness cleverly took a sub-genre that was familiar to many Westerners, but added a distinctly Japanese console-centric spin to make the game feel more attractive than its forebears. The first of these changes was the highly simplified control scheme.

Most Western first-person RPGs (FPRPG) of the time originated on the PC, Mac and Amiga and made full use of their keyboard and mouse controls. From the perspective of a console gamer they were overcomplicated interfaces that discouraged anyone but the most hardcore computer gamer. Sega's solution to this problem was typically elegant. Although it was possible to make an awful lot of commands in the game, those instructions were organised into four simple sub-categories arranged on the screen as four squares, each with an animation that showed what the command would do. The pictures themselves were selected with a simple tap of the D-pad, either up, down, left or right depending on where in the cross formation the picture appeared (see screenshots for examples). The result was a game that offered all of the complexity and depth you would expect from an RPG of the time, but with a control scheme that removed the daunting learning curve that other examples suffered from.

Sega's other secret weapon for *Shining In The Darkness* was the world and characters of the game itself. Where most Western RPGs presented their own interpretation of the *Dungeons & Dragons* universe, which was in turn nobbed from Tolkien, Sega came along and took a very Japanese approach to designing its fantasy. Though most of the characters fell into the generic 'swords and sorcery' archetype, they were drawn in a softer more anime-like style that, while considered generic in Japan, were a step aside from the norm in the US and Europe at that time. Many of the inhabitants of the *Shining* world – dwarves, elves, gnomes – were familiar to fans of the genre but others were less expected. Early on in the game the player



» The *Premium Disc* features lots of lovely concept art like the one shown here

» Game Gear Attractive attack animations have always been a defining feature of *Shining Force*

"Shining In The Darkness took a sub-genre that was familiar to Westerners, but added a Japanese spin to it"

happens upon a noisy inn (which, in a nice touch, gets noisier as you approach it) only to find inside, a fully dressed wolfman casually leaning against the bar, sipping a pint of ale. Such sights were not common at the time and immediately set the *Shining* world apart from other RPGs as something quite peculiar and unique. This early encounter at the inn fostered a desire in the player to explore the rest of the game's world to see what other strange and exotic sights could be discovered. It was all the encouragement they needed to brave the unknown dungeons and fearsome battles that awaited them.

Sales figures are extremely hard to find for Japanese games of the 16-bit era, but we have to assume that *Shining In The Darkness* was a success because it wasn't too long before Sega requested a sequel and decided to keep exactly the same creative team behind *Darkness* on the project. That team was a very small internal studio called Sonic Co (not to be confused with Sonic Team), which consisted of just four people. Two of these were brothers, Shugo and Hiroyuki Takahashi, plus Yasuhiro Taguchi and a secretary. The Takahashis were the brains behind the project, creating the fictional *Shining* world, as well as the story and gameplay of *Darkness*, while Taguchi was, according to the game's credits, responsible for the 'special effects'. For the rest of the game's development, Sonic Co contracted some of the work to a handful of individuals at the newly formed Climax, an independent developer that continues to work closely with Sega to this day.

For the sequel, Sonic and Climax continued to work together, ensuring a consistent style and vision between the two games, despite their different types of gameplay. Released in 1992 (1993 in Europe) and titled *Shining Force*, the sequel was a tactical RPG, of which there had been very few released at the time. The intended style of gameplay was similar to that of Nintendo's own *Famicom Wars* (1988) and *Fire Emblem* (1990), the player taking control of a great army and moving each unit around the battlefield like pieces on a chessboard.

Yet Nintendo's pioneering games had suffered due to the lack of power in the Famicom (NES). The units in both games used such small sprites, making it impossible to differentiate one from the other aside from simple denotations of rank and role. They were all essentially pawns, or cannon fodder if you like. *Shining Force*, however, had the advanced power of the Mega Drive behind it and could show its units in much more detail. These were no longer just a collection of pixels you would send marching to their doom. They were all individual characters with distinct features and their own carefully written backstories and motivations. And though death had little consequence beyond reducing the Force's number, and therefore making the battles harder, the individual personalities of these characters almost encouraged you to take better care of them.

The man behind the design of *Shining Force*'s characters was Yoshitaka Tamaki, who had also worked on *Shining In The Darkness* as a planner. Tamaki admired what he calls the 'melting pot of races' in *Darkness* and set about creating more weird and wonderful creatures to populate the unique *Shining* world. Some of these were necessary to the gameplay, such as the half horse/half man Centaurs that could cover more ground than a normal soldier, or the Bird Knights who could fly over water and crevasses. Others seemed to be created for their aesthetic qualities, such as the peaceful-looking Kyantol, which made for suitable healing characters and bore some resemblance to the Gelflings of Jim Henson's *The Dark Crystal*. And then there's Jogurt – a rodent-like creature wearing flying goggles – a test character, designed for fun but never intended to be a part of the game. The developers loved him so much, however, that he was hidden within *Shining Force* as a secret character and made several more cameo appearances throughout the rest of the series.

Populated with interesting characters and using a style of gameplay that was relatively unknown in the West, *Shining Force* was a huge hit with Mega Drive owners. The reasons for this are many. The

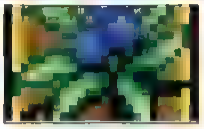
TIMELINE

- Shining In The Darkness [Mega Drive, 1991]
- Shining Force [Mega Drive, 1992]
- Shining Force Gaiden [Game Gear, 1992]
- Shining Force Gaiden II: Sword Of Hajya [Game Gear, 1993]
- Shining Force II [Mega Drive, 1993]
- Shining Force CD [Mega-CD, 1994]
- Shining Force Gaiden: Final Conflict [Game Gear, 1995]
- Shining Wisdom [Saturn, 1995]
- Shining The Holy Ark [Saturn, 1996]
- Shining Force III Scenario 1 [Saturn, 1997]
- Shining Force III Scenario 2 [Saturn, 1998]
- Shining Force III Scenario 3 [Saturn, 1998]
- Shining Force III Premium Disc [Saturn, 1998]
- Shining Soul [GBA, 2002]
- Shining Soul II [GBA, 2003]
- Shining Force: Resurrection Of The Dark Dragon [GBA, 2004]
- Shining Tears [PS2, 2004]
- Shining Force Neo [PS2, 2005]
- Shining Force EXA [PS2, 2007]
- Shining Wind [PS2, 2007]
- Shining Force Feather [DS, 2009]

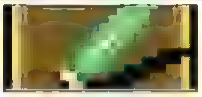
IN THE INVENTORY

Some of the best items you'll find in Shining Force

Dragon Rod
From: *Shining Force III*
+32 Attack, +4 Defence, +40 Fire Resistance **Special:** Summon Hell Dragon



Herb
From: All *Shining* games
Restores 10hp



Shining Sword
From: *Shining Force III*
+59 Attack, +30 Dark/Light Resistance **Special:** Mirage Round attack

Heat Axe
From: *Shining Force*
+22 Attack **Special:** Blaze magic

Angel Wing
From: All *Shining* games
Safely returns all units back to town

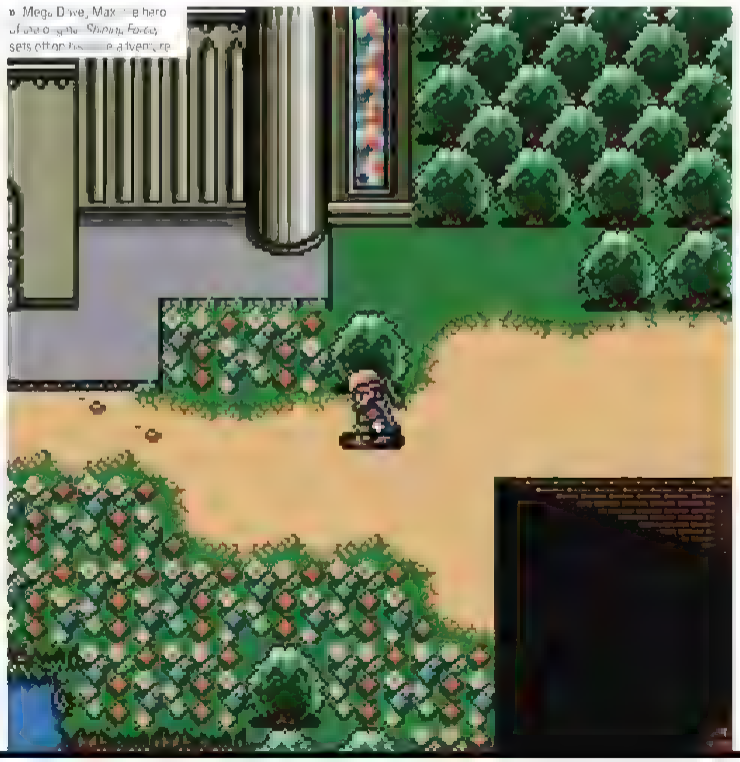
"Shining Force III is the pinnacle of the series but it is also the game that undoubtedly doomed the franchise"

game world is a colourful place. Unlike the drab and dreary locations of American RPGs, making it a pleasure to explore. While the strategy battle system rewarded patient tactical play with the satisfying feeling of controlling a huge army in a grand high-stakes battle – and without any boring level grinding either. Also of importance is the fact that *Shining Force* retained the D-pad arranged, clearly animated menus from *Shining In The Darkness*, to make each and every battle fully accessible to even the most novice RPG player.

The strategy style of *Shining Force* met with such success that Sonic Co stuck to the same style for the next five entries in the *Shining* series. One full sequel on the Mega Drive, three spin-offs for the Game Gear, and a remake of the first two Game Gear titles on Mega-CD all hit between 1992 and 1995. And although each of these games was set in a different time and place they were all linked, not just by a consistent gameplay style but with subtle references to each other game, often showing connections between stories and characters separated from each other by hundreds of years. This was all possible, of course, because the same two people, the Takahashi brothers, were still in charge of the series and maintained creative control of everything from the gameplay to the story. Speaking of the Takahashis, sometime after the release of the first *Shining Force*, the brothers actually left Sega to set up their own company, called Camelot Software Planning, which would be allowed to produce games for other platforms but would continue to collaborate with Sega under the name of Sonic Co.

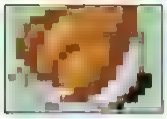
1995 proved to be a huge turning point for the company now known as Camelot. Its first non-Sega game, PlayStation's *Beyond The Beyond*, was released in this year and this was also the time that the *Shining* series deviated from the strategy mould for the first time since *Shining In The Darkness*. Although originally designed with the Mega Drive in mind, 1995's *Shining Wisdom* was hurriedly moved over to the fledgling Saturn, presumably to minimise production costs through the move from cartridge to CD, while bolstering the catalogue of games available on the new system. The result of this was a game that didn't look anywhere near as advanced as other Saturn games like *Virtua Fighter*, but was a great game nonetheless. Designed similarly to Nintendo's *Legend Of Zelda*, *Shining Wisdom* was a puzzly dungeon-exploring RPG with an interesting combat mechanic that involved charging into enemies at high speeds.

Sadly, *Shining Wisdom* was unfavourably received by some fans at the time. Unhappy with the shift from strategy to action and disappointed by the developer's seeming inability to use the Saturn hardware, series followers wrote off *Shining Wisdom* as the low point of the series, for a few years at least.



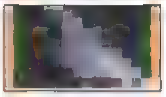
» Mega Drive. Max, the hero of the original *Shining Force*, sets off on his adventure.

» Mega-CD. Every *Shining Force* game seems to have a battle like this.



Quick Chicken
From: All *Shining* games
Increases agility

Teeny Bikini
From: *Shining Force*
Secret clothing that can only be worn by certain characters



Rifle
From: *Resurrection Of The Dark Dragon*
Only found with a cheat cartridge

Bouncing back just a year later, Camelot released the first in a new generation of *Shining* games that would actually turn out to be the developer's last, but would also prove to be the high point of the series for years to come. Released in December 1996, *Shining The Holy Ark* returned to the series' roots of first-person perspective dungeon crawling with all the power of the Sega Saturn making it much more attractive than the Mega Drive's *Shining In The Darkness*. With a whole new visual style, using pre-rendered characters, a bit like *Donkey Kong Country*, *Shining The Holy Ark* looked like no other RPG of the time and used its excellent visuals to create a sense of immersion previously unseen on consoles. As well as the familiar dank and dirty dungeons of the genre, *Shining The Holy Ark* also had players exploring spooky woods, ice palaces and haunted mansions alongside a team of ninjas, wolfmen and 'Dragonewts' – a variety of settings and personalities that made the world of the game much more fun to explore than virtually any other FPRPG.

The masterstroke at the heart of *Shining The Holy Ark*, however, was the way it prepared players for the epic new trilogy that was to begin in 1997. The story of *Shining The Holy Ark* introduced characters and plot strands that would become much more important in *Shining Force III* – a game that was due to play out over three separately released discs and, for the first time, in 3D.

The most ambitious of all the *Shining* games, *Shining Force III* is the pinnacle of the series but it is also the game that undoubtedly doomed the franchise as well. Planned as three separate disc releases between December 1997 and September 1998, *Shining Force III* offered the player three full-length strategy RPGs, each with its own plot and cast of characters but with an overriding story to link the whole trilogy. The first disc, entitled *Scenario 1: God Warrior Of The Kingdom*, put the player in control of a Republican army that sets out to clear the name of its king, who has been falsely accused of kidnapping the neighbouring Empire's ruler. The second disc, *Scenario 2: Target: Child Of God*, told the same story but from the perspective of the Empire. Playing as the son of the Emperor you follow exactly the same story as on the first disc but with different battles and a whole new perspective on the situation. The final disc, *Scenario 3: Bulzome Rising*, sees both of these Forces join together to fight against the 'Bulzome', a demonic religious cult that has been manipulating both sides all along. Interestingly, the Force in the third scenario is led by a demon hunter named Julian, who was last seen as a very young boy in *Shining The Holy Ark*.

Shining Force III's multi-release structure allowed it to tell a story totally unlike that of any other RPG before it. By offering several different perspectives on the same conflict, each as sympathetic as the other, it created a much more mature, less simplistic depiction of war than most videogames ever attempt. It showed that the distinction between good and evil is not always as clear cut as we might like and, rather oddly for a war game, it postulated that communication and diplomacy can solve problems just as well as a big bloody battle.

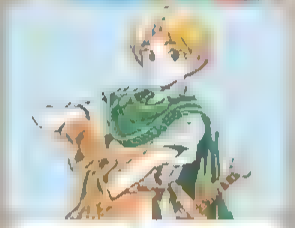
The structure had some noteworthy effects on the gameplay, too. Several points within the first adventure offer a series of choices that at first seem like very simple decisions, but actually have an effect on

SHINING HEROES

Or... a beginner's guide to the most generic characters in gaming

MAX

RPGs usually have clichéd characters and *Shining Force* is no different. Original hero Max ticks all the boxes. He's an amnesiac adopted child, skilled with a sword and living within earshot of the royal castle. He's eventually sent on a small mission that turns out to be a mission to stop a demonic beast, called Dark Dragon, from entering the human world.



BOWIE

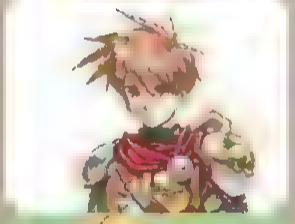
A much more down-to-earth hero than Max, *Shining Force II*'s Bowie is a simple swordsman who finds himself trying to prevent an ancient evil from awakening. So, erm, the story's just like the first game. Unlike Max however, Bowie doesn't have a robot for a best friend and actually manages to get with the princess in the end.

MARS

Even though *Shining Wisdom* featured completely different gameplay to *Shining Force*, the characters and story were just more of the same. Mars is the descendant of a legendary knight and must put his sword to good use as defender of Parmecia. A Dark Elf named Pazort is attempting (yes, you guessed it) to revive an ancient evil and it's Mars's job to stop him.

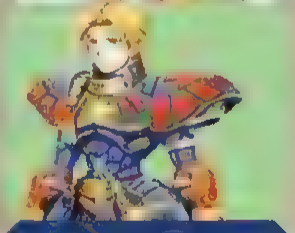
ARTHUR

The hero of *Shining In The Darkness* was completely unnamed but for its spiritual successor *Shining The Holy Ark*, Camelot wanted to give the main character a proper identity. And so, Arthur was born. At the start of the adventure, Arthur is sent into a mine to hunt a ninja/thief but actually ends up joining forces with him before heading on to bigger things.



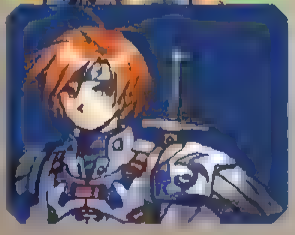
SYNBIOS

Synbios is the plucky hero of *Shining Force III Scenario 1* and, like Mars, he's a young swordsman who lives in the shadow of his father's great reputation. At the start of the game he sets out to clear the name of his king, Benetram, who has been accused of kidnapping. But he soon finds himself leading a small ragtag army against the might of the Empire.



MEDION

Medion is one of three sons of the supposedly kidnapped Emperor Domane, and is the only one of those three who doesn't totally despise the Republic. As the leader of the Force in *Shining Force III Scenario 2* he first has to confront the Republic but soon comes to sympathise with their plight.

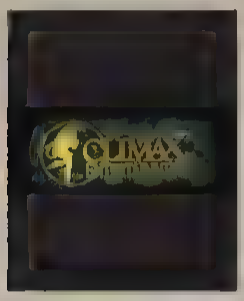


JULIAN

One of the most popular characters in *Shining* history, Julian first appears in *Shining The Holy Ark* as an abandoned child, then appears ten years later in *Shining Force III* as a 'Vandal Hunter', intent on slaying the demons that killed his parents. He's a member of all three forces and leads the one in *Scenario 3* himself.

SHINING DEVELOPERS

The developers behind the Shining series are almost as numerous as the variety of Shining games themselves. Here's a rundown of who exactly made each game in the franchise



CLIMAX ENTERTAINMENT

This small Japanese developer helped the Takahashis get the *Shining* series going by helping them out on *Shining In The Darkness* and *Shining Force*. Its involvement doesn't end there though. Around 1991 Climax began work on an action RPG called *Shining Rogue*, which would have starred Max from the first *Shining Force*, but the Takahashis soon withdrew permission to use the *Shining* brand. That game later became the hugely popular *LandStalker*. One of the sequels to that game, 1999's *Time Stalkers* featured cameos from lots of different Climax games, including Pyra from *Shining In The Darkness* and Jogurt from *Shining Force*. Finally, in 2004, Climax was asked by Sega to remake *Shining Force* on the GBA.

CAMELOT SOFTWARE PLANNING

Originally called Sonic Co and later Sonic Software Planning, Camelot is the true creator of the *Shining* series and worked on every game in the series between 1991 and 1998. A dispute with Sega caused the company to leave the franchise indefinitely but its most recent RPG series, *Golden Sun*, bares many similarities to the *Shining* games.

GRASSHOPPER MANUFACTURE

This crazy studio, most famous for *Killer7* and *No More Heroes*, was asked to develop the *Shining Soul* GBA games in 2002 after Sega took a four-year break from the series. Both games were directed by Akira Ueda, who later made a quirky DS RPG called *Contact*, which plays extremely similarly to his *Shining Soul* games

AMUSEMENT VISION

One of Sega's most famous internal studios, Amusement Vision is led by the idiosyncratic Toshihiro Nagoshi and was responsible for *Super Monkey Ball* and the recent *Yakuza* series. The studio oversaw many of the most recent *Shining* titles on PS2 and GBA, but only as a producer, while actual development was outsourced externally.

NEX ENTERTAINMENT

This little-known developer used to be owned by Sega and spends most of its time working as an outsource company developing sequels such as *Time Crisis 3* and *Resident Evil Code: Veronica* in total anonymity. The developer was responsible for the PS2's 2D action RPGs *Shining Tears* and *Shining Wind*.

NEVERLAND

Another obscure developer, Neverland is best known for the *Lufia* series as well as the cult Dreamcast RPG *Record Of Lodoss War*. Neverland was hired by Sega to make its 3D action RPGs *Shining Force Neo* and *Shining Force EXA*, both of which share some similarities with *Lodoss War*.

FLIGHT-PLAN

An independent studio with a diverse experience in RPG development, Flight-Plan created the tactical RPG series *Black/Matrix* and will be taking the *Shining Force* series back to its strategy roots with the upcoming *Shining Force Feather* on DS

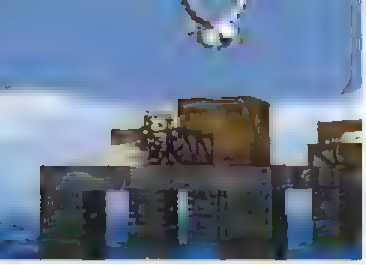
» Mega CD close-up portraits help add personality to key characters during conversation

"There's never been a better time to pick up one of the classic entries in the RPG series"

the second and third scenarios, often resulting in secret weapons or characters being made available to the Force. Quite a radical addition to the genre at the time, the method of transferring save files, and so tactical decisions, between games and their sequels has since been used by several other console RPGs such as Capcom's *El Dorado Gate*, Sega's *Shenmue* and even the recent 360 game, *Mass Effect*.

Other gameplay additions to *Shining Force III* include the ability to choose between two different categories of weapons for each character, with their proficiency for each of those weapons levelling up the more they use them, as well as a 'Friendship System' that develops skill-strengthening relationships between those characters that stick close together on the battlefield and help each other out. And, of course, there were the Saturn's blindingly advanced 3D visuals. As well as allowing Camelot to create much more complicated, multi-level battle maps for the Force to fight on, the Saturn's extra power also made the attack animations, which had always been a selling point of the series, much more beautiful than ever before.

Undoubtedly the greatest of all the *Shining* games, and maybe even Sega's best RPG too, *Shining Force III* was a masterpiece of invention, combining stunning visuals with a thoughtful story, advanced gameplay and an unusual structure. Unfortunately, however, most *Shining* fans were not able to witness the true crowning glory of this ambitious game as only the first disc of the trilogy was ever released outside of Japan. The reason for this is that Sega of America and Sega Europe



» Game Gear: Sadly not all of the *Shining Force* games were translated into English

were taking such a beating from the dominant PlayStation brand that they were losing money at a worrying rate and could only afford to translate and release the first scenario.

The first disc was released in the West in 1998 and was simply titled *Shining Force III*, with no indication that it was just the first third of a whole trilogy. This unfortunate decision must have resulted in a very confusing RPG for those who were unaware of the other two Japan-only scenarios, especially as the game ends on a cliffhanger that would apparently never be resolved. Thankfully, however, a group of enterprising fans soon got to work on translating the script of the other two scenarios so that eager importers could enjoy the full trilogy as it was intended. Each script can still be located on the net, at www.shiningforcecentral.com, where a new team is currently trying to create a patch to incorporate the translation into working copies of the game software itself.

Having poured years of hard work and inspiration into *Shining Force III*, it's understandable that Camelot, and the Takahashis in particular, weren't too happy that the complete trilogy was never fully released in the West and, as it turned out, this problem was only the tip of the iceberg. Anyone lucky enough to own the *Shining Force III Premium Disc*, a collection of new battles and bonus materials given away to fans, may be aware of a secret text document on the disc. This file is a production diary written by Camelot's programmer Yasuhiro Taguchi, who accuses Sega of not giving Camelot enough support while the publisher moved its resources over from the Saturn to the Dreamcast. Specifically, Taguchi claims that Sega did not promote the RPG as much as it should have and actually refused to help Camelot resolve some technical problems during the development of *Scenario 3*.

It's unknown if these were the only problems that Camelot had with Sega, but common sense tells us that there must have been many issues the now-independent developer had with its publisher, because this was the last time they ever worked together. Camelot walked away from Sega and the series it had created, later forming a close relationship with Nintendo with whom it would collaborate on the Mario sports games as well as the excellent *Golden Sun* series of RPGs. Sega, meanwhile, forged on with the *Shining* series by hiring different developers to create new entries but, ten years and seven new games later, none have come close to the excellence that Camelot achieved with any of its own games.

It's easy to feel a little depressed about this but with the classics now easier to find than ever – all three Mega Drive games are available on Virtual Console, while the Saturn games are becoming less valuable every day – there has never been a better time to pick up one of the classic entries in the RPG series and see what all the fuss is about. If you have any respect for authorial control, or just like highly polished and playable tactical RPGs, then we suggest you give one of them a go as soon as possible. You won't regret it.

SPECIAL THANKS TO WOLFGANG LANDGRAF FOR SUPPLYING ALL SPRITES

SHINE ON...

Although Camelot walked away from the *Shining* series in 1998, Sega thankfully kept the series going without the original developer. Sadly, most of the games it's released in the last decade have been quite poor.

The two *Shining Soul* games on Game Boy Advance were average action RPGs with the distinct privilege of being the first-ever multiplayer *Shining* games. The second was quite good, but the first was despised by fans for monkeying around with the storyline of previous games.

Shining Tears and *Shining Wind* were similar to the *Soul* games except they were made for PS2 and featured artwork by a well-known hentai artist. Most of the merchandise featured Lolita-esque fox-girls with unrealistic bodies and tiny clothing. Such presentation ruined an otherwise decent pair of games.

Shining Force Neo and *Shining Force EXA*, meanwhile, ignored the naming conventions of the series by not being strategy RPGs. Instead they were 3D action RPGs that played a lot like the *Soul*, *Tears* and *Wind* games.

Shining Force: Resurrection Of The Dark Dragon, meanwhile, is the only decent post-Camelot game so far, mostly because it was a fairly faithful remake of the very first *Shining Force* title.

As for the future, the series makes its DS debut next year with *Shining Force Feather*, a game that looks to truly return to the strategy roots for the first time in years – while the name *Shining Force Gear* has recently been trademarked and is believed to be a strategy RPG for Wii.

THE CLASSIC GAME

When you consider that school was the one place many of us couldn't wait to escape from when we were kids (as it was clearly obstructing the one thing any of us really cared about in life, playing our beloved computer games), seeing the appeal of coming home after six hours' worth of rule abiding and conforming to simply do more of the same on our Spectrums was a baffling proposition. But for those gamers bright enough to take a punt on *Skool Daze*, they would soon discover that there was a lot more to the game than just rules, learning and dillygagging.

Mr Wacker
Mr Wacker is the governor, the big dog, the headmaster. And is the one person in the school you don't cross. He's also called Mr Wacker for good reason: he's holding a cane. You do the math.

Mr Rockitt
Mr Rockitt is the school science teacher. You can tell he's a science teacher by the fact that he wears glasses and a lab coat – not that we're trying to style-stereotype science teachers or anything here.

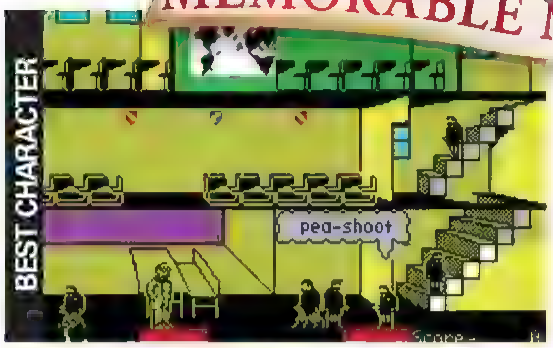
Mr Withit
The geography master reminds us of one of those slightly maverick teachers whom the boys look up to and the girls fawn over. He struts around the school with full head of hair, and both hands stuffed into his pockets.

Mr Creak
We question how good a history teacher Mr Creak really is when he can't even remember the day he was born. To coax a section of the code from Creak's brain, you have to jog his memory by telling him his date of birth.

MEMORABLE MOMENTS

A class of its own

Skool Daze offered the chance to play school rebel without actually getting shouted at. You played Eric, who is trying to get his hands on a harmful school report before his parents catch wind of it and donate his Spectrum to a skip. The document is locked away in a maximum security safe in the teacher's lounge, and requires a four-part code – which has been entrusted to the four teachers in the school – to open. In its day, *Skool Daze* was a wonderfully original title, and like *The Great Escape*, required the player to do their anarchistic wrongdoings while appearing to comply with the rules of their militant surroundings.



The kids are all right

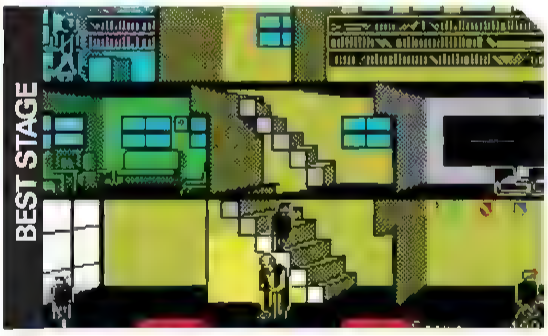
One of the best aspects of *Skool Daze* is the charming environment you get to create havoc in. As well as having to compete with the jobsworthian teachers, who will pull you up on practically everything, and dole out lines like they're battling with Obsessive Compulsive Disorder, you had to watch out for the petulant kids as well. There's your typical school boffin, called Einstein, who acts like a prefect; the school bully, Angel Face, who continually tries to get you into hot water; and school joker, Boy Wander, who plays pranks and scrawls anarchist chalk messages on the blackboard for everyone to snirk at.

You name it you got it

While a simple feature, an ingenious and very popular addition to Skool Daze was the clever option to rename the teachers and more local children in the school. This brilliant little option allowed kids to substitute the nondescript characters in the game with the names of their own school chums and teachers; thus personalising the game and making the act of firing catapult at the patrolling tutors all the more satisfying. Even better, though, was the fact that you could use words that'd likely cause your grandmother to pass out through shock, and likely to get your copy of the game confiscated by unimpressed parents.

A+ for art

The faux 3D visuals in *Skool Daze* are truly superb, particularly considering the humble Spectrum's graphical capabilities. Each of the many classrooms in the school is easy to distinguish, and the teachers and pupils look great too. Actually, at times, *Skool Daze* almost looks like a virtual comic strip, especially with the teachers and students barking out words via neat little speech bubbles. And even though the game plays out across one level, there's an impressive amount of variety in there. The presentation is superb, and the entire game feels wonderfully polished and lovingly crafted throughout.



The secret of success

To accomplish your mission you must open the safe and steal your school report. Only the four teachers patrolling the school corridors know the combination to unlock it, and to get them to spill the beans you have to shoot all of the shields scattered around the school. Doing this seems to leak an invisible truth gas into the corridors so that whenever you knock a teacher over with your catapult they blab the code. All except Mr Creak that is, who's so old his memory requires a little bit of jump-start. Once you cracked the safe, though, you then have to hit all the shields again to cover your tracks.

Rulez R made 2 B broken

Enabling Eric to steal his school report requires helping him complete his mission while adhering to the rules of school. Getting 10,000 lines will see him expelled, so to keep him on the right side of his teachers you have to ensure he attends all of his lessons (his timetable is handily shown at the foot of the screen), is never late for class, always finds a seat (which, because of overcrowded classrooms, can be problematic) and isn't caught sitting, firing his catapult and loitering inside any of the classrooms during recess. While the rules might sound annoying, they actually add to the appeal and enjoyment of the game.

What the press said... ages ago

Crash 95%

"From the moment you see *Skool Daze*, you fall in love with it, because the graphics are tremendous. The whole playing area is alive with action."

Your Sinclair 8/10

"Not so sophisticated in plot as its [successor], this is still a Sinclair classic with its good humoured style."

What we think

While the sequel is brilliant we still enjoy the original; it's the game that kicked off the whole school-sim genre. It's difficult not to get wrapped up in *Skool Daze*. It looks great and the environment is a joy to play (or should that be learn?) in.

IN THE KNOW

PLATFORM: SPECTRUM
DEVELOPER: MICROSPHERE
PUBLISHER: MICROSPHERE
RELEASED: 1985
GENRE: ACTION
EXPECT TO PAY: A FEW QUID

The Making Of . . .

BATTLEZONE

Probably the first working example of updating a 2D arcade classic to 3D, tank-combat simulator

Battlezone wowed the Eighties arcade-going public with a mix of incessant action and vector-graphics goodness. Craig Grannell talks to lead programmer Ed Rotberg about this iconic title, and how players very nearly had a much harder game to contend with

IN THE KNOW

- **PUBLISHER:** ATARI, INC
- **DEVELOPER:** IN-HOUSE
- **RELEASED:** 1980
- **PLATFORMS:** ARCADE (LATER CONVERTED TO VARIOUS HOME SYSTEMS)
- **GENRE:** COMBAT SIMULATION
- **EXPECT TO PAY:** £500+ FOR AN ORIGINAL CABINET

Although every inch the retro game with its vector graphics and simple gameplay, tank combat simulator *Battlezone* was a prescient creation. Foreshadowing a common occurrence of the PlayStation era and beyond, the Eighties Atari effort was the first time a much-loved 2D classic was reborn in glorious 3D. Suitably, it was also largely driven by technology. "Well, it all really started with the advent of the vector generator," begins Ed Rotberg, the game's lead programmer and the brains behind other Atari classics, including *S.T.U.N. Runner* and *Steel Talons*. "Howard Delman developed it in response to Exidy's equivalent generator, and we realised that once we had it working, it wasn't a big step to doing 3D."

One brainstorming session later, and the idea of *Battlezone* emerged – a game pitting the player against hostile enemy tanks in what was at the time a truly unique immersive 3D environment. "The inspiration came from those early overhead-view tank games, which everyone loved," explains Ed. "And our game was the first to market with true 3D – Tim Skelly's *Tail Gunner* from 1979 was on-rails and there was no environment, just stars . . and there's not much to doing stars in 3D!"

With the team limited by somewhat embryonic technology, Ed's approach to the game was overtly technical, and he was determined to squeeze every drop of power from what was available via a combination of careful planning and tight programming. "Where I started with *Battlezone*, like all my programmes, was deciding how to store the data," remembers Ed. "I knew we needed stationary objects that would have to be described, and since resources were precious, the objects had to be instanced. Hence, I repeated the same shapes throughout the game, merely varying the sizes and positioning."

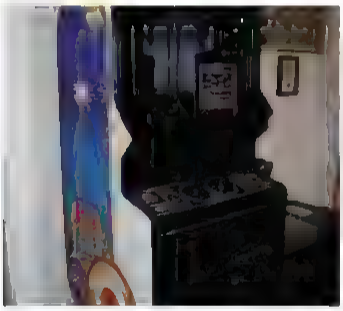
According to Ed, the maths for doing 3D is pretty straightforward, and this was even the case in 1980, so his next task was projecting a view of the world from '0, 0, 0' in the universe on to the screen. "Once got that and the field of view right, messing with the various parameters and your perspective divide, I started incrementally moving the camera around and putting in

» [Atari ST] By the 16-bit era, home machines were fully capable of replicating the *Battlezone* experience, as the accomplished Atari ST version demonstrates.

» [Arcade] *Battlezone*'s colours were project manager Morgan Hoff's idea, and differentiated the HUD from the action. As was common at the time, the colour was cellophane gels on the screen.

"ONE WAY YOU KNEW YOU HAD A GAME THAT WAS GONNA BE SUCCESSFUL WAS WHEN YOU WALKED INTO YOUR LAB AND HAD TO KICK PEOPLE OFF YOUR PROTOTYPE SO YOU COULD WORK ON IT" ED ROTBERG ON BATTLEZONE'S POPULARITY EVEN DURING ITS DEVELOPMENT

controls to enable a player to steer the tank," says Ed, identifying this as the moment he got excited about the game. "It was all theoretical until that point, but once I could drive around the playfield I knew the math and data structures were working, and I realised it was different – no one had ever done anything like this." Ed says he had no illusions at that point regarding *Battlezone* being in any way enduring, but he knew he had the first of its kind which "was very cool from that point of view."



» The colourful-looking *Battlezone* arcade cab

Next, it was a case of putting a moving object out there which was the first tank. "Once I knew I could draw an object, it was a matter of encoding the tank in the data format we were using, storing it, and changing its position and orientation every frame, along with its matrix for rotation," says Ed. "This is where engineer Jed Margolin was very helpful, in coming up with a way of minimising accumulated error. We were using fixed-point machines back then – you didn't have floating-point – and accumulated error could get out of hand, making everything distort."

By now, Ed notes that others in the department were also getting excited, and were regularly coming in and playing the game. "That's one way you knew you had a game that was gonna be successful," he says. "You walked into your lab and had to kick people off your prototype so you could work on it!"

From there, Ed says *Battlezone* was a case of putting all of the pieces together – adding collision detection, building a score system, working on rudimentary AI for the game's enemies, and crafting the various objects and visual components that went into the final version.

In terms of the nature of those objects, Ed notes he was limited by the number of vectors the generator could draw and the number of 3D calculations that could be done in each frame. "The idea was to make something that you could recognise and navigate by," he says. "The mountains were easier, since they were just a backdrop, but everything else was a balancing act of what we could get to show without slowing up the frame rate."

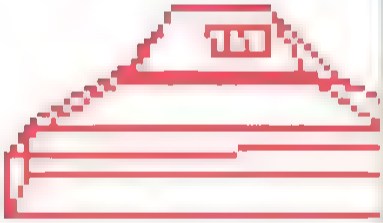
One exception to the sparsity of the environment is the erupting volcano, which came about due to fellow programmer Owen Rubin constantly hassling Ed during *Battlezone*'s gestation. "We worked in the

DEVELOPER HIGHLIGHTS

S.T.U.N. RUNNER (PICTURED)
SYSTEM: ARCADE
YEAR: 1989

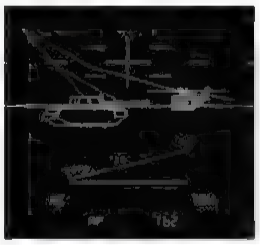
STEEL TALONS
SYSTEM: ARCADE
YEAR: 1991

PRO SERIES GOLF
SYSTEM: NOKIA N-GAGE
YEAR: 2008



» *Battlezone* utilised a unique two-stick control system, with each stick controlling one of the tank's treads

CONVERSION CAPERS



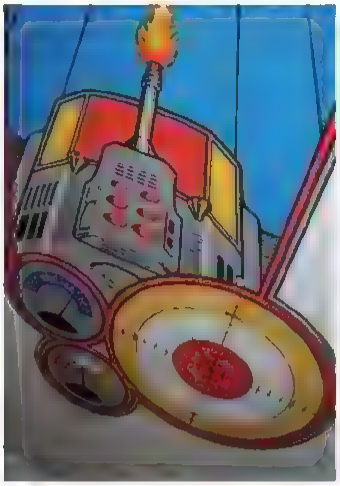
Although technology evolved at speed in the Eighties, *Battlezone* was beyond home systems for many years. "I was working with custom hardware and controllers, and the guys converting *Battlezone* had generic systems that weren't powerful enough," says Ed. "They couldn't possibly do all the 3D graphics calculations, and they didn't have the resolution to do the kind of drawing we did on the vector generator."

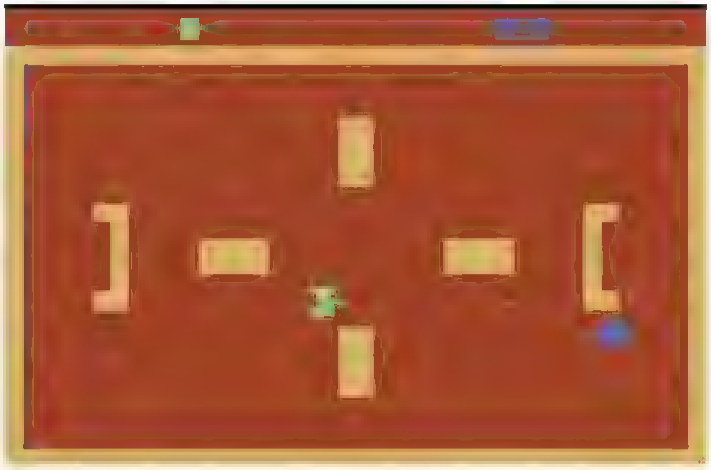
Despite the evident challenge, some memorable conversions were made, with variable levels of authenticity. On the VIC-20, speed and resolution were sacrificed, but the display somewhat resembled the original. On the VCS, vectors were ditched entirely, in favour of a fast, raster-based effort. "It was like paraphrasing – there's no way these games could quote *Battlezone*, but they could paraphrase it, and so that's what they did," considers Ed. "I had no problem with that, because I was aware of the technical hurdles."

The Making Of . . .
BATTLEZONE

WAR ZONE

A surprising offshoot of *Battlezone* was *Bradley Trainer*, a version designed for the US Army. "A group of retired generals saw *Battlezone* and thought we could come up with a training device for one of their vehicles. They got in touch with Rick Moncrief, who was gung-ho about the idea and promised a prototype in a very short amount of time," grumbles Ed, who, as a member of the 'peace generation', was anti-war and against creating something that indirectly could be used to train people to kill. "Unfortunately, no one else had familiarity with the platform or code, and so I lost three months of my life working 16-hour days to put the thing together, under condition that if Atari decided to pursue this avenue, I'd be exempt from further work on it," recalls Ed. Ultimately, Atari decided it wasn't a great business to get into, although some good unintentionally came of it. Ed explains: "The controller created for *Bradley Trainer* ended up being used in numerous other games, starting with *Star Wars*, so in that regard I guess it was a good thing!"





» [Atari 2600] Games like *Combat* and its arcade-based forebears directly influenced *Battlezone*, which took the concept into 3D

same lab, and every day he'd come in and ask when I was going to make the volcano active," recalls Ed. One day, with Ed working on a particularly nasty problem, Owen asked the question one time too many, and Ed responded that if Owen wanted an active volcano, he should programme it himself. "The next morning, the code was sitting there on my chair, and it took me a half hour to integrate it, and Owen was very happy," says Ed, laughing. "And I never had to touch that code once I put it in – it just worked."

Looking at the game now, the volcano was perhaps the team's sole indulgence – elsewhere, *Battlezone* is tightly honed, to ensure the best gameplay experience for the player. The radar, for example, far from an extravagance, is a necessity in such a 3D environment – as Ed notes. "Put someone in our 3D world and they can't turn their head – only ponderously turn the tank – and so they needed to be able to locate enemies, to immediately react and do something about them."

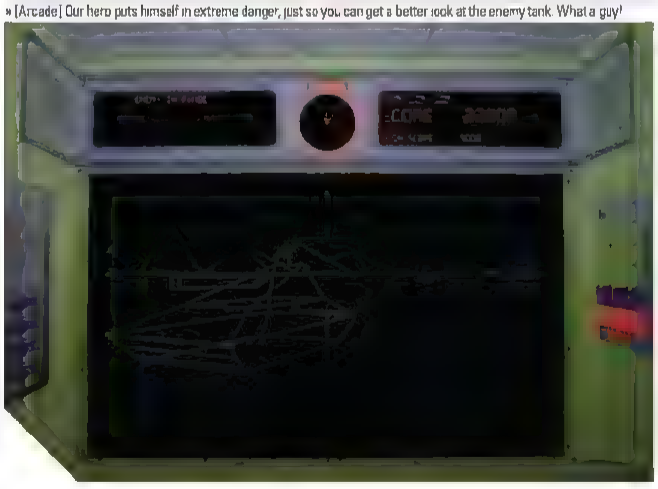
Regarding the enemies, Ed designed a fairly linear progression, starting with a standard tank that he terms "the learning level, where you figure out how to shoot." With that being fairly easy, a saucer was then introduced. "This is a high-point target, but go after it and you'll be distracted from the tank, which makes the game harder," explains Ed. For some variety and added toughness, an unsympathetic super tank was added to the mix, along with a missile.

Of the enemies, it's the missile Ed remembers most fondly. "The missile was interesting because it was the only thing that moved in the vertical dimension, other than the pieces that flew around after something exploded," he says. "I really liked the way it turned out – while there's this pseudo-random motion of zigzagging that a missile takes towards you, after a while you sort of anticipate when it's going to turn and where you need to fire – there's a Zen-like quality to fighting the missiles that was really very different to anything I'd seen in videogames to that point."

Of course, with classic Atari releases the game was only a small part of the puzzle – the company had a penchant for crafting unique cabinets with suitably distinct controls. In the case of *Battlezone*, two sticks were provided, driving each of the virtual tank's tracks. The reason for this choice, according to Ed, was simple. "We said, well, a tank's got two treads and that's how they turn – by forward and backward motion of the treads." Budgetary restrictions limited the treads to a single speed, but this made the controls easy to learn, and various stick positions provided a diverse array of movement, enabling your tank to turn in place, turn or reverse both left and right, and travel forwards and backwards at speed.

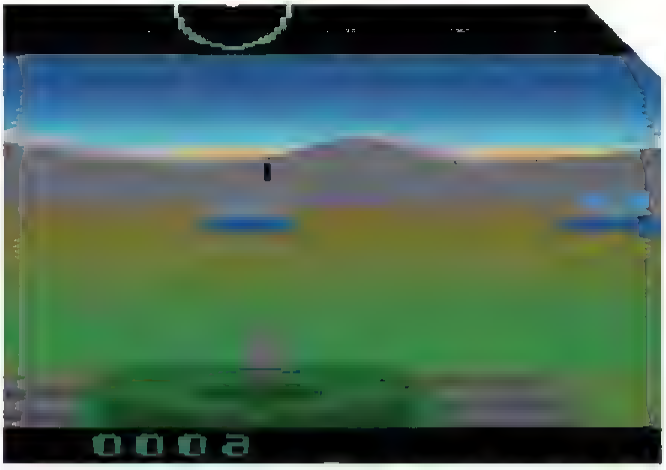
Early versions of the cabinet also included a viewfinder for the player to peer through. "The idea was to make the game more immersive," says Ed. "I don't think it really worked, though, because it was uncomfortable." Ed also notes that this component caused other problems, notably people being unable to see the game when walking by it or when it was being played. "Atari added panels to the side so people could watch, but when it came time to take home a prototype, I took a cab without a viewfinder, because I hated it – and that's what I have to this day," remarks Ed, noting

» [Arcade] Our hero puts himself in extreme danger, just so you can get a better look at the enemy tank. What a guy!



» [VIC-20] Even the massively underpowered VIC-20 got a *Battlezone* conversion, albeit a flickery and unforgiving one

» [DOS] *Stellar 7*, which was released on a number of different formats, takes the basic premise of *Battlezone* and surrounds it in a mission-based wrapper



» [Atari 2600] The VCS *Battlezone* conversion dispenses with vectors and replaces them with a colourful landscape. The compelling gameplay of its arcade parent remains largely intact, though.

"PEOPLE CLAIMED THEIR FRIENDS GOT TO THE VOLCANO. BUT THE PLAYFIELD WRAPPED AROUND – 16-BITS IN EITHER DIRECTION AND YOU WERE BACK AT ZERO!" ED ROTBERG ON PEOPLE BEING DUE TO ACHIEVE THE IMPOSSIBLE

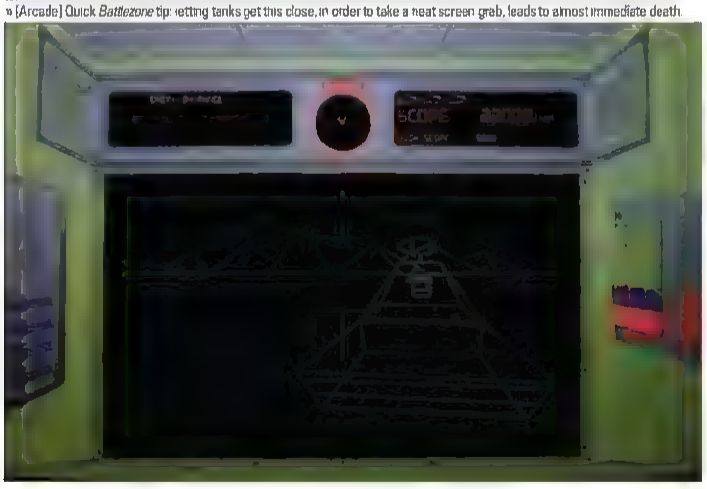
that a combination of cost reductions and earnings indications regarding potential punters being able to see attract screens led to later units dispensing with the viewfinder entirely.

With about 15,000 units produced, *Battlezone* was a hit, and various conversions, remakes and *Battlezone*-inspired efforts peppered the market for years, ensuring the original game's legacy. We ask Ed whether in hindsight he's happy with the game he largely created, and if other ideas would have made the cut had he not been up against typically tight deadlines. "There are always things you want to include but can't, or things you'd like to improve," he considers, remembering a particularly irksome high-score bug that the team never managed to shake. "From the gameplay side, there were people who'd get really into playing for a long time, and we came up with ideas for increasing the urgency and decreasing the game time."

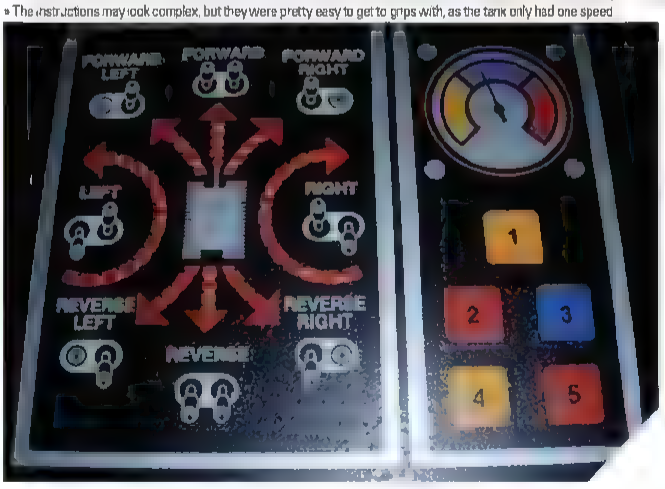
Had these ideas been implemented, *Battlezone* may have had an additional and particularly savage foe. "We talked about having launch tubes on the playfield, which you'd get a warning about and have to reach before they launched a missile," says Ed. "But unlike the standard missiles, these would come and kill you from above, where you had no defence. So you'd be dealing with those, super tanks and the other missiles at the same time." Mercifully, the original intent was for these devious missiles to only appear far later in the game.

While on the subject of extra components, we ask whether there was ever any truth in the various *Battlezone* rumours, such as concepts for reaching the volcano or discovering a tank factory spewing out enemy tanks. "No, the background was strictly a background – it rotated and was at infinity, literally," says Ed, adding that there were never any plans for it to be otherwise. "We got all kinds of letters from people asking about this, or claiming their friends got to the volcano once. But the playfield wrapped around – 16-bits in either direction and you were back at zero!"

As the interview draws to a close it's very clear Ed has a lot of affection for his near 30-year-old creation. He still talks about *Battlezone* with proudness and enthusiasm, like it's an exciting new creation, and we ask whether the game was a particularly good title to work on. "It was a great game to work on," Ed confirms. "I got to use stuff I learned in college that had lain dormant until then. I also felt *Battlezone* was groundbreaking, and it's always a really cool feeling when you know you're doing something no one has seen before."



» [Arcade] Quick *Battlezone* tip: letting tanks get this close, in order to take a neat screen grab, leads to almost immediate death.



» The instructions may look complex, but they were pretty easy to get to grips with, as the tank only had one speed.

With thanks to Frederic Delaire (www.arcadefever.net) for the cabinet photography.

RETROGRADE

SPRITES, SPRITES EVERYWHERE

PUBLISHER: THALAMUS
RELEASED: 1989
GENRE: SHOOT 'EM UP
FEATURED HARDWARE: COMMODORE 64
EXPECT TO PAY: £2+

HISTORY

Let's face it, when it comes to shoot-'em-ups, Amstrad came a poor second to C64. Sure, you had the likes of Cybernoid, Light Force and Zynaps, but when it came to scrolling shooters, nothing could match the slickness and sheer liquid smooth speed of Commodore's machine. Armalyte, Katakis, Salamander, Wizball – they all moved with a speedy grace that just wasn't possible on the CPC, and I would find myself inwardly flinching whenever I had to acknowledge to my smug mate that the C64 was indeed the better machine when it came to my favourite genre.

And so we come to *Retrograde*, one of the slickest shoot 'em ups I've ever played on Commodore's 8 bit baby. Like a strange amalgamation of *Solar Jetman* and *Side Arms Hyper Dyne*, *Retrograde* is an impossibly fast blaster that looks amazing thanks to its detailed sprites, huge bosses and supersmooth scrolling. Published by Thalamus and coded by Transmission Software, it's the sheer ambition that impresses the most. There are 12 different weapons, which can be constantly upgraded and even sold off as you can only hold a certain number at any one time – and they can be fired from 16 different points around your jet propelled space marine. Stages switch between horizontal and vertical and feature the same incredibly smooth scrolling while the gameplay is also pleasingly diverse and requires you to shut down the nerve centres found on each of *Retrograde*'s seven planets.

Yes, it's insanely hard in places and it takes a certain amount of time to get used to the sheer speed of enemy sprites as they whizz past, but it does come together and when it does it's an utterly joyful experience. In fact so impressive were my afternoons spent on *Retrograde* that I finally swallowed my pride and demanded a machine for Christmas. I didn't get one until several years later, but needless to say, *Retrograde* was one of the first games that actually bought for it.

GAME & WATCH
GAME&WATCH MULTI SCREEN
BLACK JACK
MG-61
PG-92
Nintendo 1983
DONKEY KONG II
TROPICAL FISH
TF-104
R-106
GAME & WATCH FIRE RC-04
GAME & WATCH VERMIN MT-03
GAME&WATCH HELMET
MARIO BROS.
GAME&WATCH MULTI SCREEN

AT THE DAWN OF THE EIGHTIES NINTENDO WAS ONLY JUST STARTING TO EXPLORE THE INDUSTRY IT WOULD EVENTUALLY DOMINATE. LONG BEFORE THE NES, MARIO, AND ZELDA THERE WAS THE GAME & WATCH – THE SERIES OF HANDHELD TITLES THAT WOULD ULTIMATELY SIRE THE ALL-CONQUERING GAME BOY. DAMIEN MCFERRAN EXPLORES THE HISTORY OF POCKET-SIZE GAMING

Year released: 1980 - 1991

Original price: Approx $30

Buy it now for: £5+ (depending on model)

Why the Game & Watch range was great… The range offered true portability for the first time in the history of the videogame industry. The units were small, durable and the cell batteries lasted for ages before they needed to be replaced. Forced to work within the confines of the crude LCD technology, Nintendo succeeded in crafting some truly mesmerising gaming experiences, the vast majority of which stand up to scrutiny even by today's standards

When you look back on the history of videogames it's not uncommon to discover amusing anecdotes regarding defining moments in the industry. For example, rumour has it that Namco's *Pac-Man* was conceived when the game's creator Toru Iwatani glanced at a pizza with one slice missing, and there's an equally famous tale that suggests that Nintendo's renowned Mario was named after the landlord of the company's American offices, who happened to bear an uncanny resemblance to the Italian plumber. Whether or not these stories are actually true is a moot point but it's impossible to deny that they lend our hobby a sense of wonderment and it's remarkable to think that these toweringly popular ideas can be born from such humble beginnings.

The genesis of Nintendo's Game & Watch series is recounted in an equally whimsical tale. According to legend, Nintendo engineer Gunpei Yokoi came up with the concept after observing a bored Japanese salary man absent-mindedly fingering his pocket calculator while travelling to work. If the story is true then this seemingly innocuous encounter ultimately gave birth to portable videogaming as we know it today. Yokoi was tragically killed in a roadside incident in 1997 and although he would gain worldwide fame and adoration as the creator of the Game Boy, many view his earlier LCD legacy with the most fondness

Yokoi started working at Nintendo in 1965, assuming the modest role of an assembly line engineer. The Nintendo of that era was a very different beast to the one that we know today, the main focus of its business was 'Hanafuda' playing cards. According to yet another of those irresistible yarns, Yokoi created an extendable arm in order to amuse himself during the long working hours and this device happened to catch the eye of company president Hiroshi Yamauchi, who was inspecting the factory at the time. Yamauchi was on the lookout for a product that could turn around Nintendo's fortunes, the playing card market had slumped badly in the mid-Sixties and the president had tried all manner of different tactics to turn a profit.

Yamauchi was instantly intrigued and tasked the young Yokoi with turning his extendable arm into a bestselling product. It was a risky move that was by no means guaranteed to succeed, but the re-christened 'Ultrahand' proved to be a runaway success, shifting more than 1.2 million units worldwide and would prove to be the first in a long line of popular toys to spring from the mind of Nintendo's new star employee. These novel creations would eventually earn Yokoi his very own department within the company, known as Research and Development 1 Group

Towards the end of the Seventies, Nintendo started to disregard toys in favour of videogames and it was during this time that Yokoi had his aforementioned chance meeting with the bored businessman and his calculator. It was ideal timing; LCD technology was cheap and videogames were big business. However, up to this point quality gaming was restricted to either the arcade or the home. Several companies had already produced portable games, but they were usually rudimentary LED-based units with uninspiring gameplay and were too bulky to be deemed truly mobile. Yokoi watched the efforts of companies like Mattel and Tomy with interest, he had his own ideas for the portable gaming industry

INSTANT EXPERT

The official mascot of [illegible] range is Mr Game & Watch [illegible] famously appeared in *Super Smash Bros Brawl* on the [illegible]

Sixty G&W games were released in total, although [illegible] of those were ever on sale [illegible] the public – the 60th game was limited to 10,000 units and [illegible] away free as a prize.

The Silver game [illegible] renamed *Headache* in the UK because distributor CGL believed people would be offended by the sexual [illegible] original title.

Micro Vs Boxing [illegible] branded as *Punch Out!* in America to [illegible] arcade game.

Game & Watch [illegible] cameo appearance [illegible] *WarioWare* series.

In the late-Nineties [illegible] classic Game & Watch titles [illegible] re-released as part of the [illegible] Classics key ring range.

Some Game & Watch [illegible] included battery cover stickers which could be applied to [illegible] cables from removing the battery cover and swallow[illegible] batteries contained within.

Some Spitball Sparkey [illegible] were produced with white [illegible] opposed to the usual silver [illegible] understandably, these are worth a few bob these days.

The game Egg is identical to *Mickey Mouse* in terms of gameplay – it's rumoured that it was produced for release [illegible] territories where Nintendo [illegible] licensing deal [illegible] didn't exist.

Just like regular [illegible] of the Game & Watch titles [illegible] cheat codes that [illegible]

RETROINSPECTION: GAME & WATCH

It was during the development of the Game & Watch that Yokoi laid down principles of hardware design that would echo through Nintendo's history right up to the present day, dubbing it 'Lateral Thinking of Withered Technology'. Freelance journalist and all-round Yokoi admirer Lara Crigger explains: "Essentially, Lateral Thinking of Withered Technology boils down to using mature technology in novel or radical applications. At the time of the invention of the Game & Watch, LCD technology was everywhere. It was a well-understood process and because prices for individual components had dropped so much, integrating LCD into a product was relatively inexpensive. Some people at Nintendo wanted to use fancier technology in the Game & Watch, technology that would have reduced battery life and raised costs but Yokoi insisted that affordability was key and that the player cared more about fun gameplay over flashy technology." Yokoi would later apply this philosophy to the production of the Game Boy, and Nintendo has taken a similar stance with recent hits such as the DS and Wii.

Yokoi faced a tricky conundrum when it came to deciding upon the best interface for his new product. He quickly decided that a conventional joystick would impede on the Game & Watch's portability, so he began looking for solutions that would take up less space. Many of the early machines simply possessed a couple of buttons with which to control the game, usually corresponding to simple actions such as moving left and right or jumping, but 1982's *Donkey Kong Jr* changed all that. Although it was actually four buttons arranged in a cross shape, with each one corresponding to up, down, left and right, it would later evolve into what we now know as the direction pad, or 'D-pad' for short. This was a development of truly seismic proportions, as Crigger acknowledges: "The entire portable games industry wouldn't exist if it weren't for the invention of the D-pad. It was that first, necessary invention that made all portable gaming devices possible. It comes down to basic ergonomics, the D-pad eliminates the need for a joystick, thus streamlining the controller interface and facilitating portability. A controller with a D-pad simply takes up less physical space." Compared to other methods of control available at the time, this new interface presented undeniable advantages. "The D-pad is a more intuitive method of controlling gameplay, compared to the alternatives," continues Crigger. "Look at a joystick: to manipulate it, you have to use the sides of your thumbs and fingers – or in some cases, your palm or whole hand. That takes more manual effort than just pushing buttons with a thumb tip."

There was also an element of convergence with this new range of handhelds. Although it seems like a trifling addition in today's technologically advanced world, the inclusion of a digital clock in each game (therefore giving rise to the name 'Game & Watch') was a major selling point back in the early Eighties. Although LCD watches were commonly available they were outside the reach of most children, so the Game & Watch was a useful device as well as a source of entertainment. A handy alarm feature was also available – possibly to wake up the owner after a particularly heavy night of LCD gaming.

Arguably the most vital piece of the hardware puzzle was the choice of power source that would bring these tiny games to life. Yokoi opted for 'button cell' batteries, previously seen in digital watches and calculators. Not only were these cheap to replace, they were also small and therefore fitted snugly within the machines without breaking the sleek, straight lines of the casing or adding any additional weight that might hinder portability. Yokoi's desire to ensure his products would be inexpensive to run and not require a constant supply of fresh batteries played a vital part in ensuring the success of the range – a fact he was sure to remember when he came to create the Game Boy almost a decade later.

But there was much more to the appeal of the Game & Watch range than just mere interface design and long-lasting power. Because LCD technology granted the developers a very limited amount of on-screen real estate in which to place their action-packed gaming experiences, the games themselves tended to be extremely focused. "There was little room for design screw-ups," says Crigger. "If the game mechanic wasn't simple enough, or addictive enough, then the game failed. It couldn't hide behind flashy FMVs or intricate storylines. It was just player and mechanic, and that's it." The experiences offered by the Game & Watch may seem primitive by today's standards, but that very same simplicity was a major factor in the ultimate success of the lineage and it's a testament to the concept that the games are still eminently playable even today. "They're appealing for the very same reason that *Tetris* will never really die: simplicity is addictive," comments Crigger. "People love activities that are easy to learn, but hard to master."

The first Game & Watch title was the simplistic *Ball*. Released in 1980 this endearingly basic game showed only faint glimmers of the kind of depth later Game & Watch titles would possess, the screen was completely blank, the gameplay was unsophisticated and the LCD characters somewhat crude – clearly a case of the developer finding its feet with new technology. Sales weren't astonishing but the

» By the time the Game & Watch Tabletop series appeared, Nintendo was being a bit more hands-on with worldwide distribution, as this advert proves.

» Light-hearted adverts such as these appeared in UK comics like *Eagle*.

» The man himself – Gunpei Yokoi created the Game Boy, but sadly died in 1997.

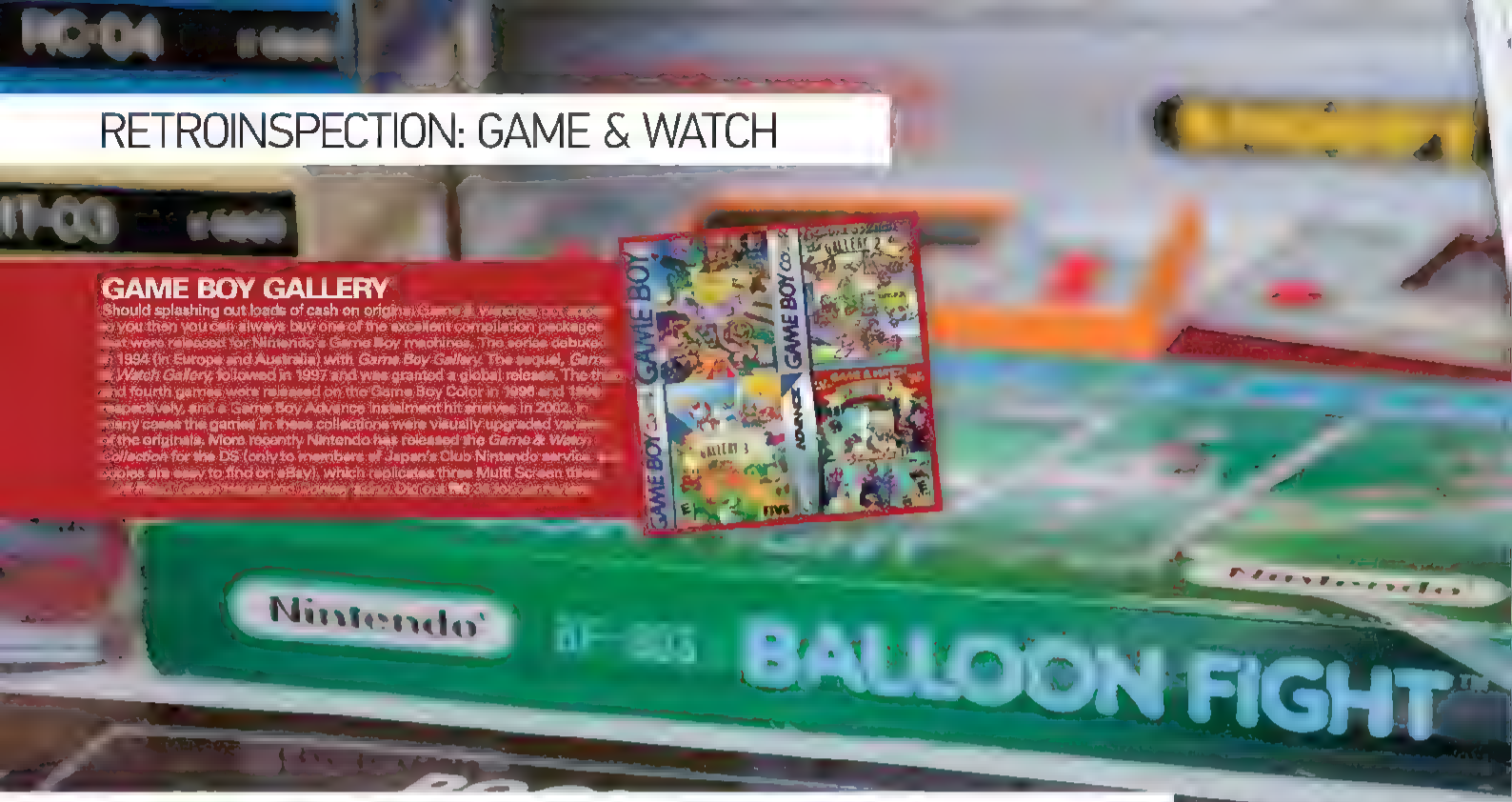
» LCD will never die. Mr Game & Watch looking arse in *Super Smash Bros Brawl*.

FROM A TO B

Mindful that each Game & W... limiting nature of the LCD display, Nintendo decided to include two ... difficulty settings for each machine, thereby increasing the long-term ... appeal of each title. Known as 'Game A' and 'Game B', the player has ... to press the corresponding button before starting play, to decide what ... challenge they wished to face. Game B was usually faster and more ... demanding, but there were exceptions – *Flagman*, for example, had ... two different games and the 'B' variant is generally seen as the more ... enjoyable. Multi Screen release *Squish* is another and is, in fact, Game ... actually a two player version of 'A'. Although it was a neat concept to ... add hours of playtime to each release, not all titles carried this ...

GAME BOY GALLERY

Should splashing out loads of cash on original Game & Watch versions not be your thing then you can always buy one of the excellent compilation packages that were released for Nintendo's Game Boy machines. The series debuted in 1994 (in Europe and Australia) with *Game Boy Gallery*. The sequel, *Game & Watch Gallery*, followed in 1997 and was granted a global release. The third and fourth games were released on the Game Boy Color in 1998 and 1999 respectively, and a Game Boy Advance instalment hit shelves in 2002. In many cases the games in these collections were visually upgraded versions of the originals. More recently Nintendo has released the *Game & Watch Collection* for the DS (only to members of Japan's Club Nintendo service – copies are easy to find on eBay), which replicates three Multi Screen titles

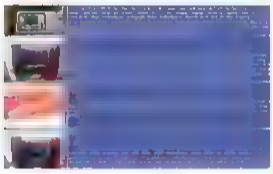


COMMUNITY GAME & WATCH SITES TO WATCH

Mike's Nintendo Game & Watch Forum

www.mpanayiotakis.proboards19.com

Mike Panayiotakis's excellent forum is a vibrant hub of Game & Watch activity and is the ideal place to learn about the complexities of starting a collection. A must-have resource for prospective fans



Andy Cole's Game & Watch Collection

http://homepage.ntlworld.com/gameandwatch/gw.htm

Cole's G&W page is one of the net's oldest and forms part of a wider site that charts his entire videogame collection. The best part is the GIF animations showing sections of each game

Parachuter

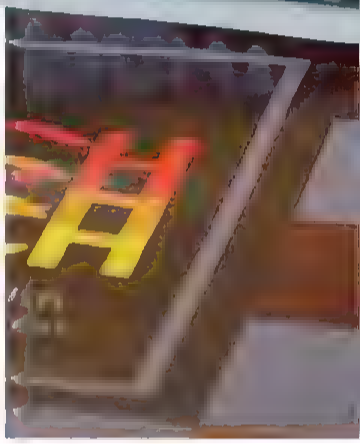
http://p-edge.nl/parachuter/

Martin Van Spanje's site is attractive and brilliantly designed – which is no surprise when you consider his current job is a system developer. There are loads of high-quality images to be found here, as well as some Game & Watch ring tones, recorded by Van Spanje himself

Game & Watch.com

www.gameandwatch.com

Another well-realised site devoted to Nintendo's Game & Watch. It recently celebrated its fifth birthday. It's easy to see why the site has been around for so long – it has bags of content and great design. Worth a visit should you crave more knowledge on the G&W series



game seemed to strike a chord with consumers and this was enough to persuade Nintendo that it was worth creating further titles. *Ball* marked the first release of the 'Silver' series of Game & Watch titles, so called because of the colour of the metallic faceplate. The next step was the 'Gold' series, which was fundamentally the same machine but with a different faceplate and a smattering of static colour on screen to make the games seem a little more vibrant. This range spawned a mere three titles before it was superseded by the 'Wide Screen' variant in mid-1981. As the name suggests, the display was a whopping 30 per cent larger than the one seen in the Silver and Gold range.

The limitations of the LCD display meant that Nintendo was always looking for ways to innovate, and the next logical step was to add another screen to double the amount of gameplay each title could potentially offer. The Multi Screen series kicked off with *Oil Panic* in 1982, but it was the release of *Donkey Kong* that really cemented the success of the range. Easily the biggest selling of all the Game & Watch titles up to that point, *Donkey Kong* was a startlingly faithful representation of the arcade smash hit. Iconic in design, the Multi Screen range would influence future Nintendo design choices. "It's no secret that the Nintendo DS was based on the original Multi Screen Game & Watch design and that just shows how far ahead of its time this idea was," comments hardcore collector Mike Panayiotakis.

Released in 1983, the Tabletop series was something of a departure for the norm. It sacrificed portability for more impressive colour visuals and ran off bulky 'C' batteries. Sales of this machine were steady but nowhere near as impressive as its Wide Screen and Multi Screen cousins, and therefore only four Tabletop titles were ever produced. A refinement of the technology resulted in the more mobile 'Panorama' series a few months later, which used a foldout mirror to enhance the vacuum fluorescent display. Nintendo's seemingly insatiable desire for colour gaming culminated in 1984's ill-advised 'Supercolor' range, which was in fact just a standard LCD display with a colour overlay. Only two games were ever produced, making this the least successful entry in the Game & Watch canon. Sensing that gaming was also a social pastime, Nintendo decided to publish the 'Micro Vs' series in the same year, which offered simultaneous two-player action thanks to a pair of small detachable controllers.

Also in 1984, the final hardware revision was released in the shape of the legendary 'Crystal Screen' machines. These were more traditional games in keeping with the Wide Screen style, but they possessed a transparent LCD display. Sadly these screens were highly susceptible to damage. Marketed as a luxury item, the range didn't quite achieve the same kind of fame as the more traditional Wide Screen games, which by this point had been relaunched under the snappy title of 'New Wide Screen'.

Although it's strange to think it now, Nintendo didn't really command much of a presence outside Japan at the time, so worldwide distribution of early Game & Watch machines was handled by other companies. These included Mega (USA), CGL (UK), Ji21 (France), Videopoche (Belgium) and Futuretronics (Australia). Many of these firms would re-package the devices and in some cases remove the Nintendo logo altogether, instead replacing it with their own.

By the mid-Eighties Nintendo had released the NES home console and the Game & Watch range took a back-seat role. As the decade drew to a close the seemingly vast reserves of innovation began to run dry, but it was ultimately Yokoi himself that would deal the deathblow to his beloved pocket-sized offspring. *Zelda*, the penultimate release in the range, hit shelves in 1989 – the same year as Yokoi's newest pet project, the Game Boy. It was instantly obvious that the writing was on the wall for the videogame and clock combo. The very last entry in the series was a

» Believe it or not, but these are actual erasers of various Game & Watch titles. Perfectly formed, it's almost a shame to actually use them for their actual purpose.

» Yokoi's Ultrahand – the toy that established an empire.

» Time Out was another company that distributed Game & Watch machines in the US – note the lack of Nintendo branding on the machines.

DIFFERENT [illegible]

Silver Range
The one that started it all. The Silver range consisted of five different titles and lacked the colourful screen overlays that would be seen in later titles. Five games were produced in low quantities and as a result they're pretty rare these days.

Multi Screen
Pre-dating the DS by over 20 years, the Multi Screen effectively gave twice as much action by adding an additional LCD display. Because the game could be closed when not in use, it made it even more durable. A smaller version that opened sideways was also released.

Tabletop
Bulky, power-hungry and practically un-portable, the Tabletop range was something of a backwards step, recalling memories of the unwieldy electronic games of the late-Seventies. Unsurprisingly, the range didn't sell as well as the traditional G&W machines, although in terms of gameplay these are still wonderful machines to own.

Micro Vs
Providing much needed multiplayer action, the Micro Vs range featured two small joypads that could be stored within the system when not in use. The thin screens were less welcome, however, and the series was not as successful as might have been expected.

loving homage to the game that started it all – 1991's *Mario The Juggler* recycled the gameplay from *Ball* but showcased gorgeous screen artwork. It was the end of an era, but with the new-fangled Nintendo wooing gamers the world over, few seemed to mourn its passing.

Given the durable nature of the Game & Watch range, the appealing design of the casing and the desirable Nintendo branding, it's little surprise that a truly hardcore collecting scene has risen up over the past few years. The reasons for this differ depending on which collector you happen to speak with. "For most of today's collectors, it's simply nostalgia," comments British Game & Watch fanatic Andy Cole. "People now find themselves with the resources to buy the games they lusted after in their childhood, which their meagre pocket money couldn't buy them." Others do it more for the love of the brand, such as Dutch collector Martin Van Spanje. "I have always loved Nintendo games and the Game & Watch series are basically where it all started for that company," he says. "I want to see them all, and find out how Nintendo made progress."

Whatever the reason, amassing all 60 of these unique devices isn't an easy (or cheap) task.

"Even though many of the games can be found for a fiver, you need lots of cash if you want all 60 of them," explains Van Spanje. "My collection has already cost me around 3,600 euros, and I'm still missing four of the more expensive games. Also, I don't collect mint condition games and I don't care about the packaging and user manuals. If you want all of that as well, you need to at least double your piggy bank." Indeed, boxed specimens in pristine condition can fetch prices well into triple figures and the elusive '60th' game – a special edition of *Super Mario Bros* produced in 1987 – is very hard to locate. "This is the Holy Grail of Game & Watches and remained almost completely unknown in collector's circles for over a decade," explains Cole. "It was produced as a prize for a competition for owners of a NES F1 racing game. Ten thousand were given away in Japan only, making this by far the rarest Game & Watch title. Only in the early 21st Century, when collectors in Japan spread the word, did this game become widely recognised. Because of its rarity, its value is higher than that of any other game in the range – expect to pay about £300 just for an unboxed specimen."

Another aspect that makes the range so appealing today is the durability of the games themselves. "As can be seen by the number appearing in auctions and in collections, they are still going strong, thanks mostly to their extremely simple electronics," comments Cole. "They are probably more reliable than a games console of today; I expect that they'll still be around long after the last PS3 is in landfill." Van Spanje expands on this. "The games were intended for kids and fit inside your pocket. If you keep them safe, they will last for ever even if you play them regularly."

Has our intrepid gang of Game & Watch experts got any advice for prospective collectors? "A potential collector should first set a target," advises Panayiotakis. "There are many things to collect and buying everything isn't an option unless you have unlimited money. Do you wish to collect boxed games? Do you wish to get special versions of the games? Do you wish to get all 60 games? You need to focus on specific items and create a list of things you wish to collect." Cole gives similar guidance: "The answer I always give to this question is to go slowly as it's possible to get a complete collection of every title in as little as a month or two if you have the money, but where's the fun in that? Decide on a goal before you start. For example decide if you want loose or boxed games, special or regular editions, then stick to your goal and be patient to wait for the right games to come along. My collection took me about five years to complete but I got some extremely good bargains and that is more satisfying than blowing a few grand all in one go."

Special thanks to Andy Cole for providing exclusive hardware photography for this feature and thanks also to Justyn Chan for additional images.

PERFECT TEN GAMES

Although the general quality of the 60 games released in the Game & Watch range is very high, there are obviously a handful of titles that stand out as true classics worthy of your time and money. We asked our trio of Game & Watch experts to come up with their most memorable titles...

01

DONKEY KONG JR (NEW WIDE SCREEN)

» **RELEASED:** 1982

» **BY THE SAME DEVELOPER:** CRAB GRAB

01 **The first 'New'** Wide Screen release justifiably possesses a lofty reputation among hardcore collectors. "It has the best playability ever in a Game & Watch release," states Martin Van Spanje – which is high praise indeed when you consider the high quality of most Game & Watch titles. Mike Panayiotakis is in agreement: "This is the only game I owned as a kid and it holds a special place in my heart. It has some great gameplay as well." Assuming the role of Kong's cute offspring, the basic aim is to free your captive father by unlocking the bolts on his cage. It may have crude visuals but they're surprisingly atmospheric. "While none of the Game & Watch titles are exactly realistic, I always thought that this one really made you imagine that you *were* in the jungle," says Andy Cole.

DONKEY KONG II (MULTI SCREEN)

» **RELEASED:** 1983

» **BY THE SAME DEVELOPER:** TROPICAL FISH

02 **An early Multi** Screen release, *Donkey Kong II* is technically the sequel to *Donkey Kong Jr*, with Kong's plucky offspring once again called upon to save his beloved father – only this time across two hazard-packed screens. "This is a brilliant game," says Van Spanje. "After moving all the way up the second screen you have to work your way down again to set a switch. It's a challenge to play, and fun too, every time you open the cage and free your father." Featuring some lovely case artwork and attractive screen presentation, it's little wonder that *Donkey Kong II* was a roaring success and continues to be fondly remembered by fans even today. Because it was a huge seller, second-hand units are common and cheap, so if you're looking to start a collection then this is well worth investigation.

02

SPITBALL SPARKY (SUPERCOLOR)

» **RELEASED:** 1984

» **BY THE SAME DEVELOPER:** PINBALL

03 **One of the two** releases in the ill-fated Supercolor range, *Spitball Sparky* is a *Breakout* clone at heart. While it doesn't work as well as you might hope, it remains an intriguing example of Nintendo really trying to push the remit of the Game & Watch range. "It's great because it's an attempt to create bats-'n'-balls type gameplay using crude LCD graphics," says Van Spanje. "It's not altogether successful but it is great to see Nintendo trying to work around the limitations of the LCD screen and watch the games maturing ahead of the technology." Sadly, the larger Supercolor units are a lot less portable than other machines.

MARIO THE JUGGLER (NEW WIDE SCREEN)

» **RELEASED:** 1991

» **BY THE SAME DEVELOPER:** BLACK JACK

04 **Although this was** the last Game & Watch handheld to be made, it's actually a remake of the first title in the lineage rather than a fully fledged release. The crude visuals of *Ball* are updated excellently, with Mario taking centre stage. The screen is also attractively illustrated with scenes from *Super Mario Bros.* "*Mario The Juggler* looks really nice with a colourful screen background and the game is quite addictive and musical," says Cole. The gameplay isn't as deep as you might want but it proves that the core concept of *Ball* is strong enough to remain entertaining. It's also quite collectable these days.

ZELDA (MULTI SCREEN)

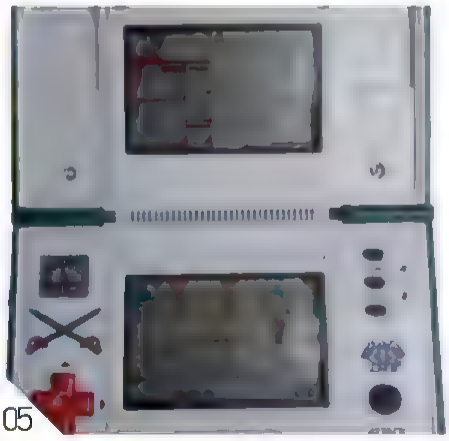
» **RELEASED:** 1989

» **BY THE SAME DEVELOPER:** SAFEBUSTER

05 **The penultimate Game** & Watch was released in the same year as the Game Boy and by this point it was clear that the series was on borrowed time. Nevertheless Nintendo chose to go out with a bang. "Even though it's nothing like the *Zelda* we now know, it did capture the feel of the world it was played in," says Van Spanje. "It's basically stabbing opponents with a knife, and then defeating the same old dragon over and over again, but it's a piece of *Zelda* history." Although it was a Multi Screen release, the action is confined to the lower screen, with the top display being used solely for statistics and information.

03

04


05

06

07

08

SUPER MARIO BROS (VARIOUS)

» **RELEASED:** 1986

» **BY THE SAME DEVELOPER:** RAIN SHOWER

06 The first Game & Watch release to feature horizontally scrolling levels, *Super Mario Bros* was incredibly advanced for its time. Although squeezing the addictive gameplay of the NES original into the primitive LCD hardware wasn't really a possibility, this is nevertheless a pretty convincing facsimile and remains one of the most entertaining titles in the range. The visuals are a little basic (this is mainly due to the scrolling levels, which use flat lines to give the impression of movement) but everything else is exceptionally polished. The special edition variant was limited to 10,000 and is very rare, but it has the same gameplay as the other versions.

BALLOON FIGHT (NEW WIDE SCREEN/ CRYSTAL SCREEN)

» **RELEASED:** 1986 (CRYSTAL), 1988 (WIDE)

» **BY THE SAME DEVELOPER:** MARIO'S CEMENT FACTORY

07 First released as part of the coveted Crystal Screen range of Game & Watches, but eventually given a more affordable New Wide Screen outing, *Balloon Fight* is yet another painfully addictive addition to the Game & Watch line-up. Although *Balloon Fight* shares its name with the famous Nintendo arcade game, this brilliant Game & Watch is actually based on the 'Balloon Trip' mode that only appeared in the NES home console release. You play as a young chap with a jet pack and you're tasked with moving through the scrolling levels collecting balloons and avoiding traps as you go.

CLIMBER (NEW WIDE SCREEN/CRYSTAL SCREEN)

» **RELEASED:** 1986 (CRYSTAL), 1988 (WIDE)

» **BY THE SAME DEVELOPER:** SNOOPY

08 Many collectors view *Climber* as the 'perfect' Game & Watch release in terms of gameplay. "It's a near-perfect implementation of limited LCD graphics and manages to include multiple levels, moving platforms and end-of-level bosses," says Van Spanje. "It should still exist today as a mobile game. If not, someone should make it and re-release it." Like *Super Mario Bros*, the visuals look basic due to the scrolling levels, but *Climber* feels far more vibrant and active than most LCD titles. If you want a solid introduction to the world of Game & Watch, try this.

09

MICKEY MOUSE (WIDE SCREEN)

» **RELEASED:** 1981

» **BY THE SAME DEVELOPER:** MANHOLE

09 It's amazing to think this now, but many of the characters that graced the early Game & Watch titles were licensed from other companies, and Nintendo stars like Mario and Donkey Kong only got their chance to shine later. Along with Snoopy and Popeye, Disney's Mickey Mouse featured in several titles, with this Wide Screen outing probably his best. "I love playing the game and just like the look of it," says Van Spanje. The game involves catching eggs and is almost identical to another G&W release entitled *Egg*. It's believed that this other variant exists because Nintendo didn't have worldwide rights to use the *Mickey Mouse* licence. The gameplay is simple but addictive, and it is an interesting example of how Nintendo explored the weird and wonderful world of licensing in its early days.

MARIO'S BOMBS AWAY (PANORAMA)

» **RELEASED:** 1983

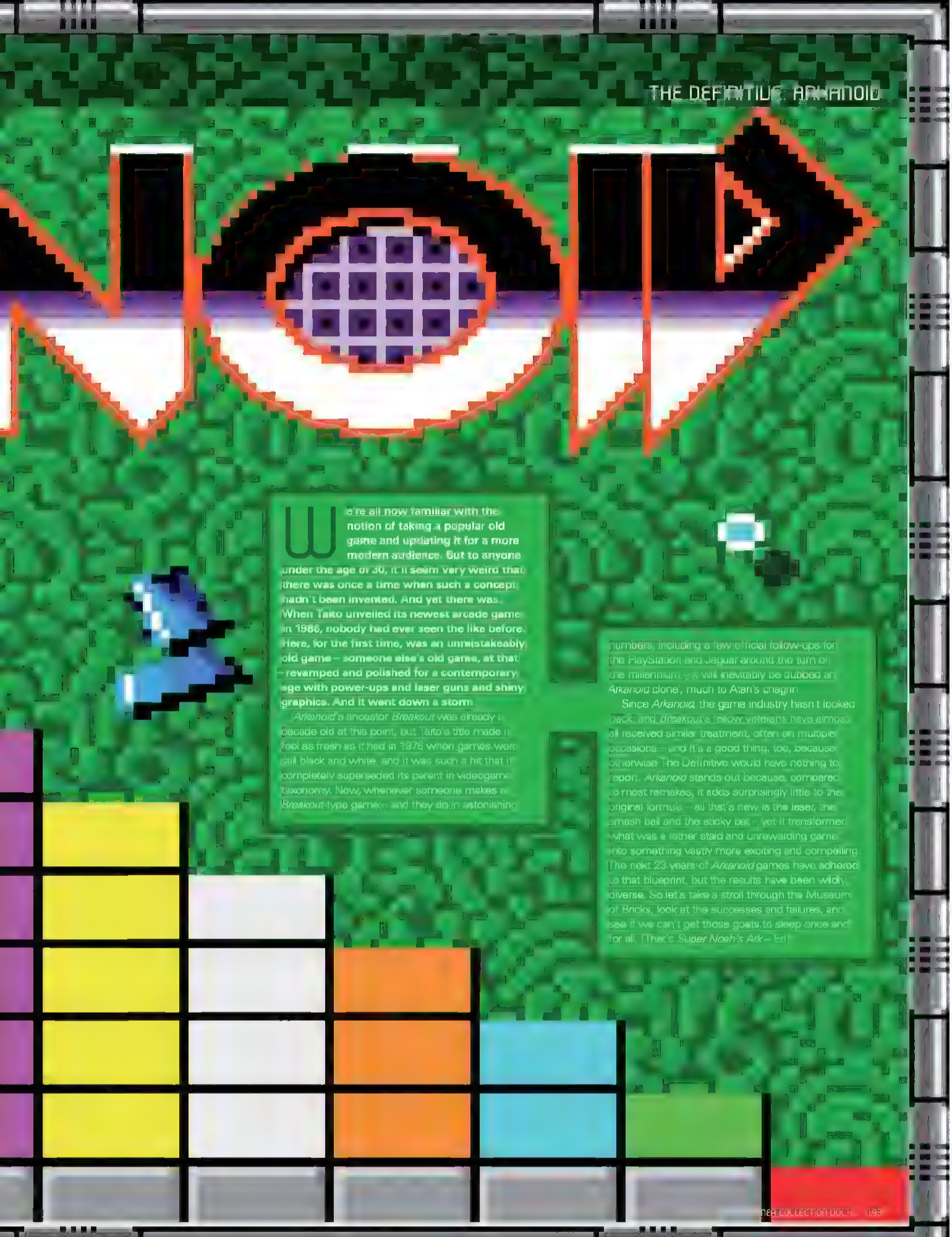
» **BY THE SAME DEVELOPER:** GOLDCLIFF

10 It may be common knowledge that Mario is a dab hand when it comes to sorting out your troublesome waterworks, but did you know that the plump Italian also has a highly decorated military career to his name? Witness *Mario's Bombs Away*, in which Mario dons his army fatigues and attempts to safely transport a succession of bombs to the enemy camp. Unsurprisingly, this dangerous activity isn't without its risks – one false move and Mario is on the wrong side of a massive explosion. "This is good fun to play and it looks good, as do all the Panorama games," says Cole. The Panorama series may not have been a huge success, but this game is certainly worth your time. Unsurprisingly, Mario seems to have disowned his wartime exploits these days – we can only guess that driving karts is less dangerous.

10

THE DEFINITIVE

In which Stuart Campbell hunts down gaming's very own elusive Area 51

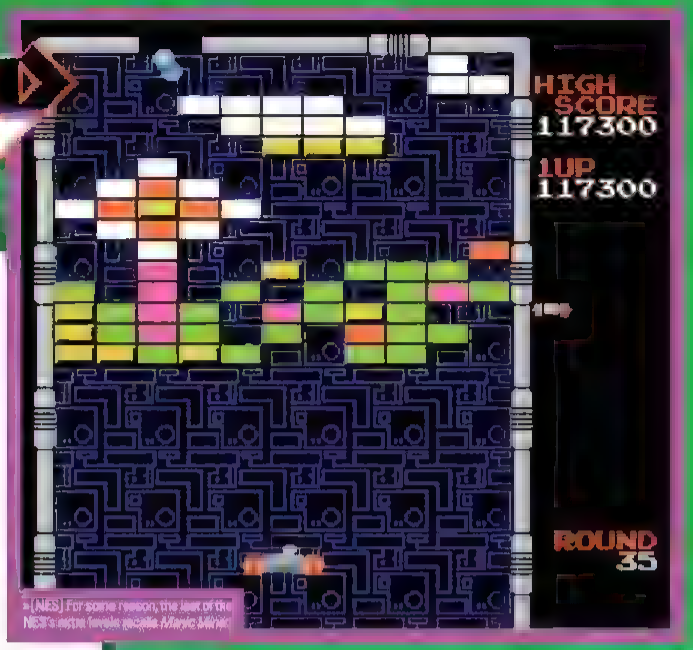


We're all now familiar with the notion of taking a popular old game and updating it for a more modern audience. But to anyone under the age of 30, it'll seem very weird that there was once a time when such a concept hadn't been invented. And yet there was. When Taito unveiled its newest arcade game in 1986, nobody had ever seen the like before. Here, for the first time, was an unmistakeably old game – someone else's old game, at that – revamped and polished for a contemporary age with power-ups and laser guns and shiny graphics. And it went down a storm.

Arkanoid's ancestor *Breakout* was already a decade old at this point, but Taito's title made it feel as fresh as it had in 1976 when games were still black and white, and it was such a hit that it completely superseded its parent in videogame taxonomy. Now, whenever someone makes a *Breakout*-type game – and they do in astonishing numbers, including a few official follow-ups for the PlayStation and Jaguar around the turn of the millennium – it will inevitably be dubbed an *Arkanoid* clone, much to Atari's chagrin.

Since *Arkanoid*, the game industry hasn't looked back, and *Breakout*'s fellow veterans have almost all received similar treatment, often on multiple occasions – and it's a good thing, too, because otherwise The Definitive would have nothing to report. *Arkanoid* stands out because, compared to most remakes, it adds surprisingly little to the original formula – all that's new is the laser, the smash ball and the sticky bat – yet it transformed what was a rather staid and unrewarding game into something vastly more exciting and compelling. The next 23 years of *Arkanoid* games have adhered to that blueprint, but the results have been wildly diverse. So let's take a stroll through the Museum of Bricks, look at the successes and failures, and see if we can't get those goats to sleep once and for all. [That's *Super Noah's Ark* – Ed]

THE DEFINITIVE ARKANOID



» (NES) For some reason, the last of the NES's extra levels recalls *Mario Bros*

1986 Arkanoid
(ARCADE, ALMOST EVERYTHING ELSE)

NOT SURPRISINGLY, GIVEN its low technical demands, *Arkanoid* is one of the most ported videogames of all time. It's appeared on the Spectrum, MSX, TRS80, NES, and MS-DOS (with playfields 11 blocks wide instead of 13, and requiring some tweaking of level layouts), as well as on the Amstrad CPC, Apple II, Atari 800, ST, Amiga (with selectable starting rounds between 1 and 20) and even in monochrome on the early Macintoshes.

Almost every port is of good quality – the Amiga being particularly well-received – but the best overall is probably the NES game, which comes with three extra levels at the end and was also sold with a dedicated paddle controller. Except in Europe, of course.

For some reason, *Arkanoid* hasn't featured on any of Taito's many retro compilations. Unconfirmed rumours suggest possible Atari copyright issues with regard to the game's similarities to *Breakout*, although given the ongoing release of sequels, that seems doubtful.

» (Arcade) The awful, suicide-inducing level demonstrates *Revenge Of Doh*'s least-welcome addition, and one that was hastily dumped again: the regenerating silver brick

1987 Tournament Arkanoid
(ARCADE)

TAITO'S US LICENSING policy has provided a rich stream of material for The Definitive to mine over the years, with the company hawking its intellectual property Stateside to companies like Midway, generating countless semi-official non-canon sequels like *Space Invaders Deluxe*. The policy was very much in force in the Eighties, and licensee Romstar was quick to take advantage by knocking out this quick mod kit released on New Year's Day, to prolong the life of *Arkanoid* before the official follow-up arrived. It features 33 new levels and as the name might lead you to suspect, they're pretty hardcore, with almost every one plated with silver and gold bricks.

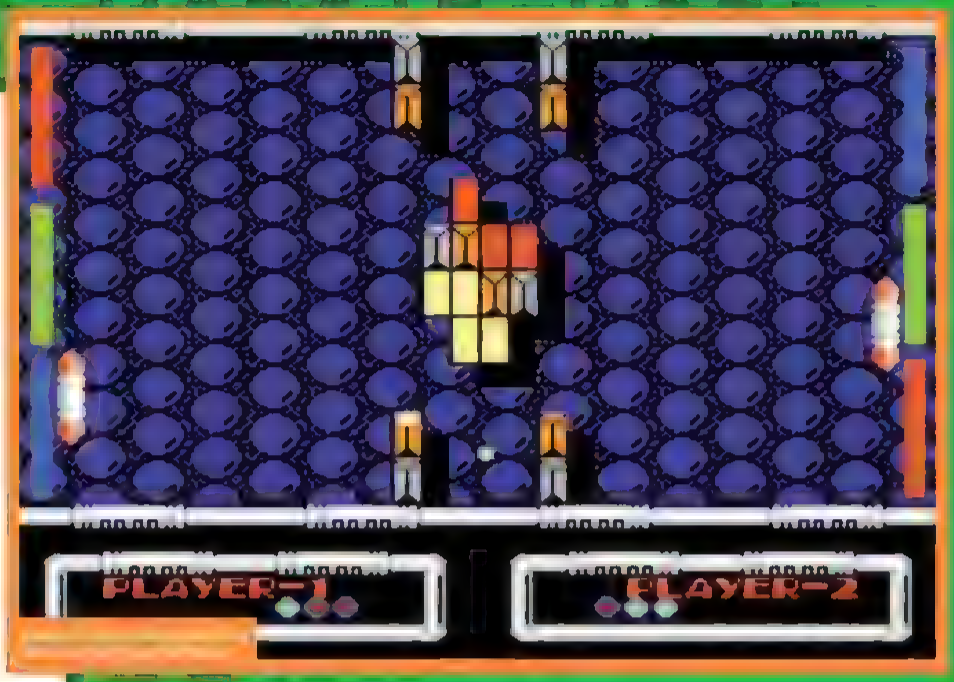
» (Arcade) This ridiculously horrible stage is fairly typical of *Tournament*

1987 Arkanoid: Revenge Of Doh (ARCADE)

YOU KNOW YOU'RE in for a hard time when you kick off Round 1 in the 'real' sequel to *Arkanoid* and note that, rather than the 78 bricks you have to knock out in the first game's opening level, here you're going to have to make a whopping 146 hits. Round 2's right-hand path similarly features 168 bricks compared to the first game's 91. The speed has been cranked up too, and in most respects *Revenge Of Doh* pretty much just takes the original *Arkanoid* and doubles it.

Although you still have to beat 32 levels of bricks to reach Doh, there are, in fact, 65 distinct stages to play, arranged in a two-column tower-like structure, which means you'll have to play through the whole game a minimum of two times to see every round. There are also twice as many capsule types, including a 'smash ball' that ploughs through bricks without bouncing and a special mystery capsule that can bestow various super power-ups including a 'ball plague', comprising dozens of normal or smash balls, or a rapid-fire turbo laser.

1988
Arkanoid: Revenge Of Doh (HOME FORMATS)

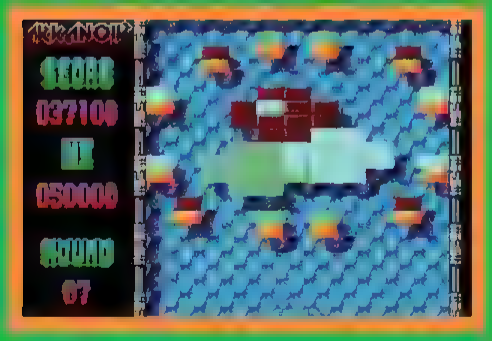


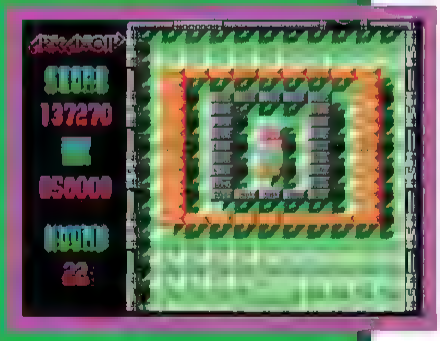
WHILE THE MANY home ports of *Arkanoid* were largely extremely faithful to the source - and therefore not particularly noteworthy in terms of The Definitive's remit - when it came to the sequel, things went very screwy, with everyone and his dog deciding to muck about and change all the rules. Even the arcades weren't totally immune to this outbreak of individuality, with the American coin-op release (licensed to Romstar) deciding to put the rounds in a different order from the original Taito version that appeared in Japan and Europe, but it was the home conversions that really threw a spanner in the works.

The Spectrum version, for example, jiggles the level order around some more, and also completely omits two of the coin-op rounds – Round 23 from the right hand path and Round 10 from the left if you're counting in Taito notation – in favour of stages spelling out the initials of coder Mike Lamb and artist Ron Fowles. It's not done there though. It also confusingly changes the capsule letters for no obvious reason and makes them all the same colour, and introduces a new one of its own. SC (no relation), which causes the backdrop to scroll, turning a game that's already pretty tough on the old peepers due to Fowles going postal with the stippling tool into an eye-torturing horror show until you collect another SC capsule to make it stop.

Other capsules also behave unlike any other version. Collect two Extend capsules in a row and, rather than increasing your size even further, the second one shrinks your bat back to its original size. Conversely, the M capsule that generates a three-way regenerating ball can now be doubled to give you up to six balls that are almost impossible to lose. The smash ball is gone from normal play, accessible randomly from the Special capsule. And finally, Spectrum *Revenge Of Doh* is the only *Arkanoid* game on any format ever where the ball launches to the left from your bat, rather than the right.

More fun is the NES version. For a start, there's an odd little playable mini-round with Doh before you even get to the title screen, perhaps meant as a sort of 'last time on *Arkanoid*' reminder of the end of the previous game. Second, the game handles the power up capsules in a weird and unique way – the first time you hit a brick containing one, the capsule appears but doesn't drop out of the wall. Instead it cycles through different types of capsule until you hit it again or a few seconds have passed, at which point it stops cycling and falls down to be collected. And third, there's a rather limited Edit mode. The best feature, however, is a very cute versus game based on *Pong* and resembling the Neo Geo classic *Windjammers*, in which you play the best of five rounds against the CPU or a human, on stages orientated sideways.





The MSX version also has the pre-title mini-round and a variant on the *Pong* versus game, although capsules drop normally. Weirdly, you retain some power ups between levels. Finish a round with the laser, extended bat or twin bat – but NOT the sticky bat – and you'll start the next stage still in possession of it, which can change the game quite radically.

The CPC version, meanwhile, demands from the start that silver bricks, including the regenerating ones, be hit four times to destroy them - the arcade starts at just twice – making even the first round a drawn-out and gruelling chore to complete.

Man, that's, like, way enough on the home ports of *Revenge Of Doh*.

THE DEFINITIVE ARKANOID

» SNES] The Definitive advises you get in plenty of practice before tackling Final Doh

1997 Arkanoid: Doh It Again (SNES)

PERHAPS WORN OUT as a result of this outbreak of creativity, *Arkanoid* took it easy for the next decade, but it came back in style with this excellent SNES-exclusive sequel. In fact, *Doh It Again* has subsequently provided the core of most mobile phone ports, although they dispense with the subtitle and just call themselves *Arkanoid*. A slightly narrowed playfield – ten bricks wide rather than thirteen – upped the pace and kept the action moving, and players face a whopping 99 rounds before the climactic battle with Doh, although there are only 33 distinct stages, which cycle through three times. Aliens can now turn into bricks or capture the ball and teleport it around, and they can also be introduced into the playfield from the sides as well as the top. There are also various nice-looking backdrops beautifying the whole experience.

You get three different two-player modes. Game A is standard turn taking, Game B has both players on screen at once, one above the other with positions alternating every level; and Game C is a split-screen affair, whereby when one player misses the ball the other scores a point and both move on to a new level, best of three winning.

Doh It Again's best feature is Doh himself. Before you meet him you'll have had to defeat mini-bosses every 11 levels. Some of them are increasingly tough snake-type creatures and some of them are normal versions of Doh surrounded by mini-Dohs, but the big boss is another proposition entirely. He's been working out since you last saw him and now has a torso and arms as well as a head, and he puts the latter to good use, stretching his arms out to grab the edges of the screen and spin it around in Mode 7, leaving you at the top of the screen with your controls backwards. It's a great multi-stage battle, and by the time you've triumphed you'll really have earned the ending sequence with its incongruous environmental message.

1997 Arkanoid Returns (ARCADE)

THE SECOND PART of Taito's 1997 double-whammy, *Arkanoid Returns* represents one of the great mysteries of arcade gaming, and it's not 'Why did Taito decide to bring out a new *Arkanoid* coin-op while throwing away all the iconic style that made *Arkanoid* popular in the first place and which it had retained in the SNES sequel?'

Returns is a horrible-looking game, binning the beautiful primary colours of the previous games in favour of some hideous pastel earth tones, and the hypnotic silence broken only by the rhythmic chimes of broken bricks has also gone, replaced by some ugly music. You don't even get the fanfare at the start of a round.

The speed has been ramped up drastically, and the only thing *Returns* has in common with its arcade predecessors are the huge walls taking an eternity to clear. Later stages feature some of the most hateful *Arkanoid* levels ever seen, requiring the player to desperately smack the hurtling ball around a completely dead gold brick zone for minutes at a time, trying to angle the ball sideways into a single gap one brick high. In short, *Arkanoid Returns* is a cynical credit-sucker designed to gobble coins as quickly as possible, regardless of entertainment, constantly apologising for its own cheapness with a stream of largely useless power-ups that fail to balance the horrible, unfair design. It's the *Arkanoid* equivalent of *Metal Slug 3*.

The mystery, though, is something altogether more intriguing. If you read reviews of *Arkanoid Returns* on the internet, they'll all agree on one thing: the game has 50 stages and no boss rounds, with Doh's appearance limited to the intro movie. And sure enough, if you play it and clear round 50, the game dumps you straight to a credits sequence followed by high-score entry and then dumps you back at the title screen. So far so straightforward, but the absence of Doh seemed so odd that we did some investigating and found the Japanese arcade flyer, which clearly depicts a Doh battle looking very much like the one in *Doh It Again*, complete with mini-Dohs and downward firing lasers.

As alert readers of The Definitive will recall from the world-exclusive unveiling of the long-lost 3D section in *Super Space Invaders '91*, this feature doesn't just let that sort of thing slide, so we started wading around in the MAME cheat options and found a 'select starting level' option that offered 52 rounds. Starting on 51 just went straight to the credits sequence, but Round 52 was a whole new stage, and upon clearing it the game kept on going. In fact, it kept on going and going and going, all the way to Round 100, doubling the size of the game. At that point Doh did indeed show up, with all his little baby Dohs and their lasers, just as shown on the flyer. Defeating him led to a whole new end sequence, clearly the

» [PlayStation] Alien autopsy not pictured.

'proper' finish to the game. But how to access this second half of the game legitimately remained an enigma.

Before you get your hopes up, it still is. We tried everything we could think of to get to Round 52 from within the game, rather than by cheating our way to it. We played right through without continues. We set the region – which unusually appeared on the MAME cheat menu, rather than the DIP switch one, suggesting a possible role – to Japan, and then to the US, without success. We noted that the flyer said: "The boss stage is very challenging and the players must co-operate to defeat him", and we wondered if, like *Bubble Bobble*, the 'true' ending was only available to two players. The flyer, incidentally, is talking cobblers anyway: if you tackle Doh with two players, either one getting killed sends you back to the start of the round. The second player is just a liability, and it's much easier albeit fractionally slower – to smack down the big fella by yourself.

So we played through the entire game with two players, without continues, without using the Break level-skip capsule, in Japan mode. Still no luck. The only conclusion it seems possible to draw is that, rather like *Super Space Invaders*, the game was chopped in half at the last minute for some reason, and the second 50 levels just blocked off, eternally to remain out of bounds to everyone but hackers. The only apparent way to play the game as it was originally intended is to get to level 50, then just before you hit the last brick use the MAME cheat to skip to 52 and carry on from there. If you know any different, write in and we may reward you with a prize of some description.

2000
Arkanoid 2000
(PLAYSTATION)

WE'RE BEING SLIGHTLY disingenuous with the name of this one, because *Arkanoid 2000* is the US title for what in Japan was released as *Arkanoid Returns*. However, by either name the home port of the coin-op adds a substantial amount of new content, including a whole new 100-level sequel that we're going to treat as a separate game, just to keep things neat.

This leaves a game that reveals just what a naked piece of money-grabbing the coin-op was by slowing down the pace dramatically and exposing the absurd speed of the arcade version as a means of generating continues. Even at its fastest, the PlayStation game is painfully sluggish, and if you collect the 'S' power-up – vital in the arcades – time practically stops completely. Nevertheless, the game is at least playable in the new, slower iteration.

Aside from the Extra game, the remaining modes include a very easy-to-use level editor, with which you can save custom stages to the memory card and play them at someone else's house, and the excellent two player Squash mode, a versus game where both players are on screen at once and take alternate shots, with each player's bat going transparent when it's not their turn so they can't interfere with the other player's shot. You play a random level, with a choice of 30 seconds, 60 seconds, or until all the blocks are gone, and the player with the most points wins the round, where the best of three rounds is the winner. Sadly there's no CPU opponent, but there's a handicap system for human players, which determines how many points you get if the other player manages to lose the ball off the bottom of the screen.

Meanwhile, we've already had a letter.

"Dear The Definitive,

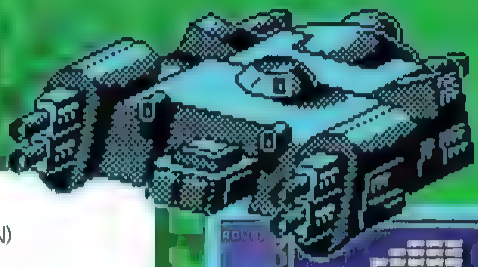
With reference to your query in the previous entry, the only way to play *Arkanoid Returns* in full, as originally designed, with all 100 rounds including the mysteriously missing 51st level, which was replaced in the arcade game by a premature credits sequence, is to play the PlayStation conversion that you appear to be writing about now. There are no special requirements, just play through the game as normal and after Round 50 you'll carry on through 51, 52 and all the way up to good old Doh at Round 100. What do I win?

Yr pal,

Dr Wolf Hammer, Innsbruck"

Wow! Cheers, Dr W. We'll get back to you on that.

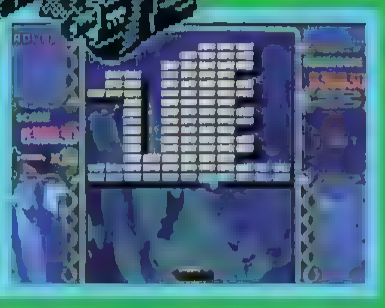
THE DEFINITIVE ARKANOID



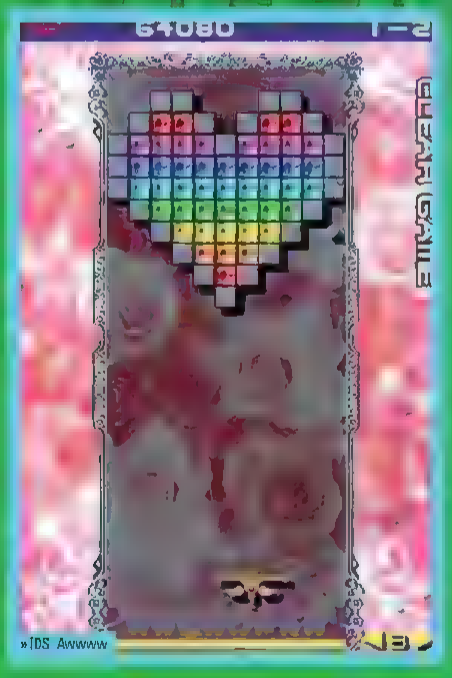
2000 Arkanoid Returns Extra (PLAYSTATION)

FOR ALL INTENTS and purposes, *Arkanoid 2000* is really a compilation pack featuring *Arkanoid Returns* and its sequel, and the Extra game – an old Taito tradition, previously seen in other coin-ops like *Bubble Bobble* and *Rainbow Islands* to extend their earning life. It's a worthy follow-up that's better in most respects than the game that went before it. It offers 100 new levels, and its new features include switch blocks, which turn gold bricks into normal ones, special white bricks that ghost in and out of existence and are used to a rather lovely effect on Round 89; and bricks that plummet to the bottom of the screen when hit and kill you if they land on you. There are new power-ups too, including a rainbow-coloured one that functions in almost the same way as the Vanish capsule from the later DS game, wiping out every brick that's the same colour as the next one you hit.

Extra's levels are rather different in tone from those of *Returns*. The first round, for example, gives you just eight bricks to hit, and there are very few of the *Revenge Of Doh*-style war-of-attrition rounds of the previous game, with huge walls full of silver and gold bricks. Particularly in the earlier stages *Extra* almost verges on a puzzle game. It's even structured much more like traditional *Arkanoid*, with boss fights every 33rd level, and all of them variations on the snake boss from *Doh It Again*. The pace does slow up in the last quarter, particularly during a nasty series of stages from 72-80, and Round 97 is the worst level of any *Arkanoid* game ever, an agonising trial of sheer luck that will typically take you 25-30 minutes to clear. Round 98 is merely spitefully tedious and shouldn't delay you for more than about 15, and then after the third appearance of the snake boss it's time to tackle our old friend Doh again before the end sequence rolls



» [PlayStation] Here you can see a few of *Extra*'s special blocks, which is a shame because we wanted to show you the level that looks like a whale spouting water out of its blowhole, but it didn't have any in it.



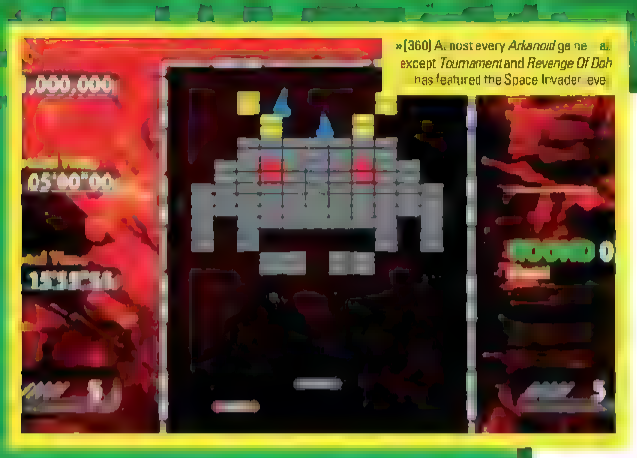
» [DS Awwww

2008 Arkanoid DS (DS)

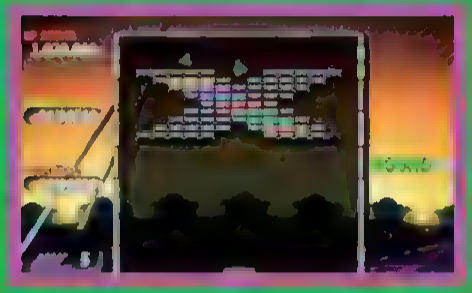
HERE'S THE BIGGEST secret we're going to reveal in this feature, even bigger than the mystery of Area 51. *Arkanoid DS* is actually quite good. Now, if you've played it a bit, understandably you'll probably be shouting at your magazine in outrage, because *Arkanoid DS* at first seems like an atrocity. The playfield is incredibly narrow and tall, with the actual width varying from level to level, the bricks are now square, which makes picking off the last one a chore even more miserable than when it was a rectangle; there's a huge dead zone across the DS's hinge; and the game has a truly hateful propensity for putting gold bricks just on the other side of it so that you only get the tiniest split second to see where the ball's going before it comes back at you through the dead zone again. Where there are original levels amid the 140-ish branching stages – a huge chunk of *Arkanoid DS*'s rounds are taken from the earlier games – they're largely spiteful, joyless gold brick-fests. And adding insult to injury, the Western releases don't even come with the paddle attachment that was bundled with the Japanese version.

But wait. *Arkanoid DS* is so mean spirited that it doesn't really deserve your persistence, but if you're bloody-minded enough to stick at it anyway, you'll find treasure buried beneath all the rubble. First, as you plough through the different branching routes you'll unlock a special Challenge stage for each round, where you'll have to perform tasks like clearing a certain number of blocks in a short time or even using a limited number of what the game calls 'launches', meaning hits off your bat. You'll also earn points you can spend in the game's shop, unlocking scores of different backdrops, brick styles, sound effects and so on, although actually implementing them is idiotically laborious. After many, many hours of play and total completion of the normal and challenge modes, you'll finally even be allowed to use original *Arkanoid* graphics.

Best of all, though, just at the point when you're cursing the very name of *Arkanoid*, you'll



» [360] Almost every *Arkanoid* game ever, except *Tournament* and *Revenge Of Doh*, has featured the Space Invader level.



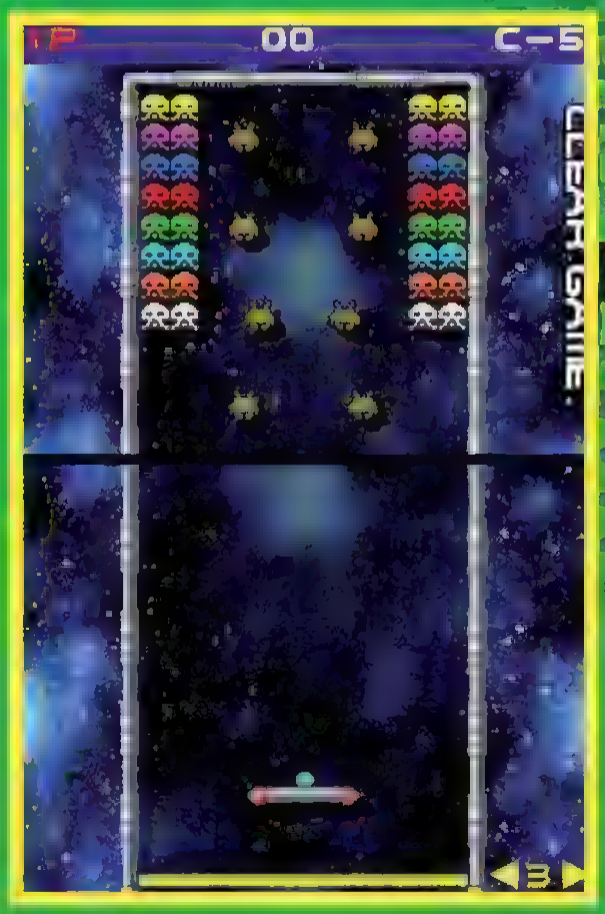
2009 Arkanoid Live (XBOX 360) Arkanoid Plus (Wii)

THE TWO MOST recent releases in the *Arkanoid* line are basically the same game under different titles. Something of a return to first principles, it initially looks and plays like a slightly shinier version of the first coin-op. The initial release comprises two 'episodes', which are standalone *Arkanoids* with 31 levels each. The first episode has classic *Arkanoid* graphics, whereas the second has the uglier style of *Arkanoid Returns/2000*. The other two episodes currently aren't available and are expected to appear as DLC some time this year.

There are also two main play styles. You can choose a classic 'lives' mode, or a new rule set borrowed from the DS game, where, instead of lives, you have a reflective shield at the bottom of the screen that bounces the ball back when you miss it and can survive a limited – and selectable – number of impacts. Indeed, beyond first impressions, you realise there's a lot of *Arkanoid DS* in here, also including the subtly enhanced control you can affect by moving the paddle as you hit the ball, the variable-width playfields and the same two 'Bust All' or 'Bust Color' versus games against human or CPU opponents. And again, an awful lot of very familiar levels – after over 20 years, is it asking too much for Taito to knock out a few new stages every now and again, instead of flogging us the same ones over and over? At least there are a whole bunch from *Tournament Arkanoid*, though, which have been seen less often.

You get a lot of *Arkanoid* for your 800 Points (Microsoft or Wii), and it learns from most of the mistakes of its predecessors. Fingers are crossed for some new levels in Episodes 3 and 4, and maybe someone could tell Taito's designers that there are better ways of making a round challenging than just lazily stuffing it with gold bricks.

unlock the appropriately named *Uranoid*, which is a new game comprising 35 non-branching rounds that are almost all far better designed than anything in the normal mode. *Uranoid* is also where you'll meet the game's 'proper' boss, a cute little robot – in the ordinary game the 'boss' is a stationary lump of jelly with a bat trapped inside it. It's massively more fun than normal mode, to the extent that it actually starts to make normal mode more enjoyable too, and the fact that it's so hidden away to all but the most doggedly determined player is as tragic as it is stupid.



COMPANY PROFILE - THE BITMAP BROTHERS

BITMAPPED BRILLIANCE

There's a reason the Amiga's operating system was called Workbench, but until 1987, there'd never been any craftsmen in position to create the works of technical majesty that the amazing computer was capable of. The industry was keeping such artisans out of sight, hidden beneath the workbench, unnamed and unknown. Then came the Bitmap Brothers to set the programmer free; brothers to all who laboured at the bench, and subordinate to no publisher. The rock stars of the programming world had risen...

» (PC) The Bitmap Brothers may have started 20 years ago, but its games are still going strong – just look at the all-new *Speedball 2!*

If history has proven anything, it's that the subjugated will rise, the oppressed will push back and the little people aren't so little when their strength is marshalled. Not to suggest Steve Kelly, Eric Matthews and Mike Montgomery are little, of course, but certainly they suffered under the harsh regime of a publisher-run software industry for many a long year before becoming the standard bearers for a new age of game developer recognition.

LOVE TRIANGLE

But these uprisings take planning, and the seeds of rebellion must be planted by a few brave souls willing to challenge the status quo. In the case of the Bitmap Brothers, it was a prophetic triangle of professional collaboration that brought the future renegades together and made them more than just working acquaintances.

Before board game conversion obsessed Leisure Genius was bought out by Virgin Games, it employed one Mike Montgomery as its marketing director. At the time, the Spectrum was a reigning contender for the 8-bit crown and Leisure Genius was eager to complete its digital board game catalogue by including Scrabble; previously licensed and published by Sinclair Research itself. The game had been written by Steve Kelly of Psion Publishing (a beloved bed partner of Sinclair Research), and he paid several visits to Leisure Genius to help with the game's re-release.

Both men had also worked with a third programmer, Eric Matthews, in 1986 on a cross-corporate project to convert Kelly's Sinclair QL beat-'em-up, *QL Karate*, to the Amiga and Atari ST. Despite receiving decent reviews, the promotion of the game was severely limited; a matter that served only to compound the rising disenchantment that had been building – quite independently – in the three coders for several years. It didn't take long before they became friends as well as colleagues, and their thoughts on the direction of the computer-game industry began to mingle.

It quickly became apparent that Mike, Steve and Eric shared a common notion. Each felt it thoroughly inequitable how the computer and videogame industry was entirely publisher orientated. When gamers bought the latest titles, it was the publisher's name that was brandished brazenly on the box art, with the development company receiving second billing (often in the case of a footnote on the back of the inlay), while programmers went completely unacknowledged, as Mike Montgomery explains.

"At the time, the publishers got all the credit. You didn't go to a shop to buy an Apple record; you went to buy a record by the Beatles! When you bought a film, your decision wasn't based on the distributor, so why would people buy games that way? In many respects, it was a case of bad promotion since the publisher's label didn't really reflect the kind of content a gamer could expect. We wanted to change all that."

It became the founding goal of their new partnership to rectify the way a game was delivered to the public, and the Bitmap Brothers became the first game developer to not only recognise its creative teams, but to actively promote them. This extra dimension of freedom and public tribute would result in some of the finest and most critically acclaimed 16-bit games ever seen, but even a creative powerhouse armed with a barrow full of vision had to face exactly the same challenges of any new business under an overfed Tory regime.

IN BRIEF

There are many reasons we'll remember the Bitmap Brothers and why its name will always carry weight with gamers, but the real reason the industry will ensure Bitmap retains its position on the highest pedestal is its promotion of the programmer as the driving force behind great games.

FINEST HOUR

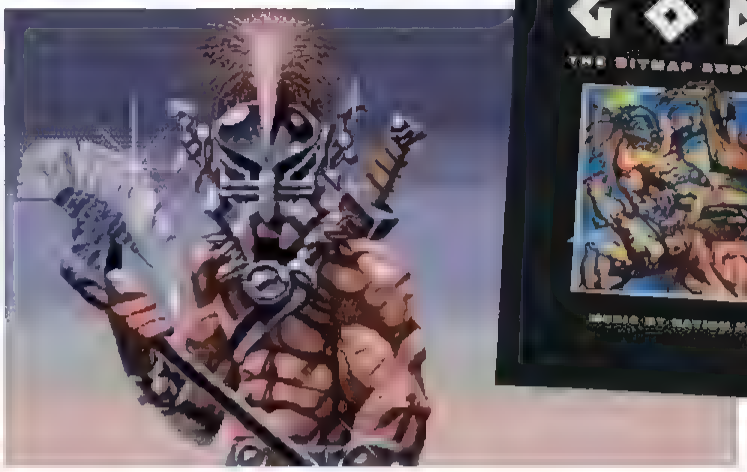
While it might usually be possible to mark a company's crowning achievement, the nature and purpose of the Bitmap Brothers makes this something of a dichotomy. While *Speedball 2* is ultimately the game most synonymous with Bitmap's achievements, the sheer enormity and latent commerciality of *Z* really shouldn't be overlooked.

COMPANY PROFILE

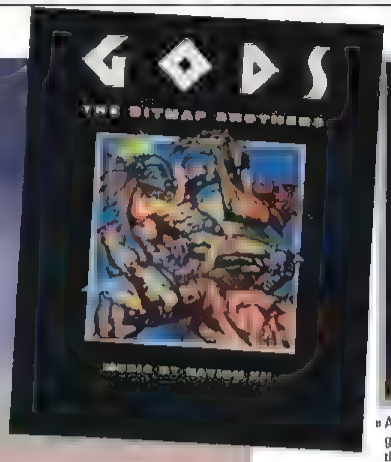
THE BITMAP BROTHERS

» There was a special edition of *Z* called *Z Platinum*. It comes in a big black box containing two CD-ROM (*Z* and the 'Directors Cut' Demo), a mouse pad, a pin, a key chain and a cool black T-shirt (Size XL).

» The loading screen from the leaked Atari ST version of *Xenon*. We think *Xenon*'s a much better name, although an unrelated shoot-'em-up later appeared called... *Kelly X*!



» Artwork (including the awesome box) for *Gods* was commissioned from renowned comic artist Simon Bisley



» A stylish, if cryptic, advert for Bitmap's first games compilation. Lots of style, just the way the Brothers liked it

BUILDING THE BITMAP

The trio's founding philosophy of energetically promoting the developers required a careful choice of name. The natural inclination to begin their reign as rock star developers was to choose a cryptic, masculine name that wouldn't look out of place in the thriving acid-house music charts of the time. But the lad's keen understanding of the necessity of intelligent media exposure kept them from succumbing to superficial indulgences, choosing instead a relevant, iconographic and enduring designation.

"Bitmap" was a well known computing phrase of the late-Eighties which carried with it the strong graphical connotations the team intended (and succeeded in) infusing its games with, while the term "Brothers" cleverly suggested the collaborative, dynastic structure the company was born into; waving a flag of defiance at the stifling industry it was breaking away from while embracing its creative brethren. The simple fact that the name Bitmap Brothers trips lightly off the tongue 20 years later and still carries with it an imposing subtext of gaming excellence is testament to the importance of a well chosen name.

Leaving their respective companies in 1987, the soon-to-be Brothers moved cautiously toward the development of their next generation games. Working from home, each team member set themselves a goal and kept in touch with the rest of the team by way of an occasional phone call and, more specifically, at a weekly meeting in a London pub (followed by a lashed-up trip to the arcades), where progress would be updated and new goals set. A workable, if slightly disjointed method of operation, but certainly one of the only ways a start up business in such a volatile, fickle industry could possibly begin.

It wasn't until after the team's first game was finished that they decided productivity would be best served with company premises, and a studio in Wapping, East London, was established. The Bitmap team was confident in its launch product, but had yet to realise its founding principle of placing a well-promoted programming face alongside any game releases, in order to get the company's image off on the right path and immediately establish the profound public visage it knew would be vital to future titles. All this cost money and, for almost a year, there was none coming in.

"Getting an office was great and speeded up the whole process of writing games, but money is always at the top of the problem list," says Mike, recalling the embryonic days of the company he still owns and operates. "At first, this meant working for months without pay, and then when you start employing people you have to pay them out of your own pocket. It takes a lot of effort to get a game off the ground before you can get a publisher to fund it, and when you're a new entity it's even harder to get the money men on your side."

"So one of the first things we did was to employ a PR person to promote us as a development team. We had some great photo shots made, which worked really well as all the magazines loved the style and were desperate to use them. All the hype surrounding us was carefully planned," Montgomery explains.

Indeed, the magazines of the day didn't really know what to make of this new and high-profile developer. And yet they didn't care; easy-to-acquire coverage of programmers wearing cool dude shades, in dramatic black-and-white photos and posing as if for an album cover looked great in the pages of a magazine, making the Bitmap Brothers a valuable media commodity before any games had even been released.

Naturally, all this hype demanded a game that was equal to the mod sh countenance the three hackers were portraying, and when it arrived in at the start of 1988, the magazines were reassured that their journalistic sponsorship had been justified.

PROGRAMMER AND PROUD

Originally titled *Kelly X* (which was changed to *Xenon* after an Atari ST beta

"THE BITMAP BROTHERS BECAME THE FIRST GAME DEVELOPER TO NOT ONLY RECOGNISE ITS CREATIVE TEAMS, BUT TO ACTIVELY PROMOTE THEM"

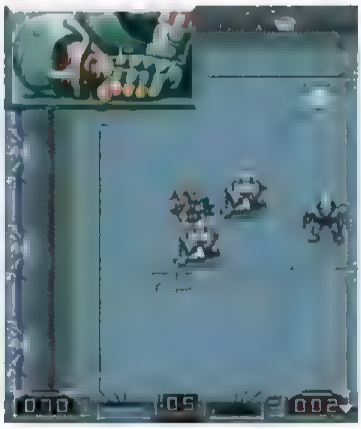
SPEEDBALL 2

Although it's now the most valuable of the Bitmap Brothers' IPs, *Speedball* got off to a shaky start. After a commissioned concept for a tennis game was rejected, the Brothers hit the pub, as Mike recalls:

"We went down the pub to drown our sorrows, but we all felt the concept could really go somewhere with a few changes. The only paper we had at the time was a cigarette packet, which we sketched out the concept of *Speedball* on. We took it to a publisher who signed it there and then."

It wasn't until the sequel to this massively popular game that the concept's possibilities were really unlocked. *Speedball 2: Brutal Deluxe* has been the Bitmaps' most prolific title, being converted to no less than 13 different formats, and with a revamped Xbox Live Arcade version and the all new PC remake imminent, the franchise shows no signs of ever slowing down.

"This time, *Speedball 2* is an international project from the beginning, and it will bring back fond memories to all *Speedball* fans and have an online element that could never have been done all those years ago," Mike told us. We can't wait!



» [Pocket PC] A pixel-perfect version of *Speedball 2* was released (under Mike's watchful eye) for the Pocket PC. The elongated screen suits the game perfectly, and is well worth a visit

» The wicked acid-house musician Tim Simenon (AKA Bomb the Bass) lent his talents and tunes to *Xenon 2* helping to create something of a landmark in Amiga history.

preview was rumoured to have leaked from Mastertronic), the Bitmap Brothers' first game was a complete critical and commercial success.

In many respects, *Xenon* was a typical shoot-'em-up, but so many of the standard fare elements of the genre had been tweaked that it was hard to find the right pigeon hole for it. Rather than the established, linear scrolling and forced direction normally associated with shooters, *Xenon* allowed for a free-roaming existence. Alternating between a ship and a tank helped infuse a pseudo 3D depth to the birds-eye-view game; punters loved it, while magazines touted it as the "first home coin-op" (*Computer And Video Games* #77, March 1988).

In truth, time has been harsh to *Xenon*, and it takes a sincere refresher course in early Amiga history to remember the significant, and justified, impact the game had. *Xenon* demonstrated the true arcade gaming capabilities of the wonderful 16-bit machine and also the significance of the still new and overlooked Amiga market. It was also the first Amiga game to make it into the all-format top 40 charts.

The smooth scrolling, awesome sound and fast gameplay fooled more than a few reviewers of the day into thinking this was a coin-op conversion. *The Games Machine* (in April '88) gave *Xenon* an impressive 88% while reporting it as publisher Melbourne House's second successful port from the Amiga-based Arcadia coin-op boards. In fact, the Arcadia coin-op version was a port of the Amiga home game; a testament to just how refined and influential the Bitmap Brothers' debut title was, even if time has tamed it for the modern gamer. Mike Montgomery even had a recent run-in with his game's arcade counterpart when out one night. "*Xenon* was converted to coin-op very early on and was really successful. A few years ago I actually found one in a pub. It was great playing it in front of my drinking pals all those years later," he laughs.

The 12 months of tenuous, difficult and financially straining development paid off almost overnight, and the devilishly well-played media game ensured the Bitmap Brothers received the accolade and recognition it had set out to achieve. As with all successes, the major obstacle immediately faced is bettering such a high-profile accomplishment, and the media (and, indeed, the gamers), had instantaneously astronomical expectations of this new developer.

A publisher had already asked to see a design for a tennis game, which the Bitmaps researched and developed while working on *Xenon*. When it came to presenting the game design, however, the publisher had changed its mind and brought the Brothers second – and fully funded – development to a complete halt. A few hours drowning sorrows down the pub changed their minds on abandoning the significant amount of research so quickly and, with the help of renowned graphic artist Mark Coleman, they redeveloped the idea into a futuristic sports simulation called *Speedball*.

One thing the Bitmap Brothers could never be accused of is repetition, since the release of each game saw it take on another genre and win, and yet the publicity machine was always running full pelt. Despite being a futuristic sports game, the second title to come from the Brothers (released in late 1988) was consistently compared to *Xenon*, which, in all fairness, verges on the ludicrous. The two games couldn't have been more different, and yet the developer had woven so many subtle (and not-so-subtle) nuances throughout both games to the point at which they did indeed cross over, making comparisons bizarrely reasonable.

The slick metallic sheen, beautifully refined graphics and liquid-smooth scrolling became the signatures of a Bitmap game, with no other developer coming close to achieving such a recognisable cult status during the entire life of the 16-bit generation of machines. But there was one area where the Bitmap team hadn't reached its full potential, and it was a gap it fully acknowledged and intended to bridge in its next game, as Steve Kelly told *ST Format magazine* shortly after the release of *Speedball*.

"Just solving the problems that occur [while] writing a game makes it all worthwhile. For instance, we set ourselves the goal of making *Speedball* faster than *Xenon*, producing big images on the screen while still ensuring the program runs smoothly. We have some of the best graphics artists around. At the moment we feel we cannot improve dramatically on our graphics or programming, but we need to concentrate on the weakest element – sound."

HIP HOP ON PRECINCT B

In 1989, the Brothers had reached full swing and was planning for a future designed by its own team of artists, prophesised by its programming oracles and, after its next game, remembered by the song of its own techno-sirens.

A sequel to the debut game was planned by the Bitmaps, then passed to one of the few development teams who'd shown a similar talent for the smooth scrolling and attention to detail that had become synonymous with the Brothers; The Assembly Line. *Xenon 2: Megablast* was a sequel in name only, adopting a more established shoot-'em-up style (automated, single-direction vertical scrolling, although the direction can be reversed a short space) alongside the trademark Bitmap Brothers visuals.

If it was possible to ignore the eye-blisteringly vivid, stunningly Giger-esque graphics, playing *Megablast* with the sound turned down would yield a pretty average twitch shooter experience. Of course, it's utterly impossible to ignore that incredible imagery, and the sound changed the way people listened to their home computers forever.

Teaming up with record label Rhythm King – who shared a distinctly similar philosophy when it came to artist recognition – one of its most successful bands was drafted in to help recreate a recent chart hit of the same name as the Bitmap's new

Z

While *Speedball 2* has sold more units across many, many platforms, Bitmap's real-time strategy game *Z* is its best seller on a single machine.

More than four years in the making (explaining the apparent absence of the Bitmap Brothers after *The Chaos Engine* projects), Mike explains the enormity of the undertaking.

"While we were in the process of writing it, CD-ROM began to take over as the format of choice for PC so we had to change lots of things, and go back through to add lots of cut-scenes. It was almost like starting the project all over again when we were halfway through. It took so long to write and cost so much to develop, but it was worth it as it sold the most of all our games."

One of the first RTS games to demonstrate the importance of a carefully balanced AI and a simple learning curve, this is one of the great under-appreciated titles of the last decade.

Steve Kelly and Eric Matthews at the Bitmap Brothers stand at a German computer fair in 1989.

One of the founding brothers of Bitmap, Mike Montgomery still looks after the company's IPs, including the new Speedball 2 game.

COMPANY PROFILE

THE BITMAP BROTHERS

» The Bitmaps publishing label, Renegade, was a joint venture with Rhythm King Records.

AVOID LIKE THE PLAGUE

Equally difficult to place, even the lesser Bitmap games were infused with such detail and enthusiasm they overshadowed the competition without effort. Perhaps, then, we should mark down *Magic Pockets* for its rather vulgar Saturday morning prostitution on *Going Live*.

sequel. Bomb the Bass's Tim Simenon worked with Eric Matthews and computer musician David Whittaker to recreate the acid-house classic on the Amiga.

The result was one of the finest and most revered recreations of a genuine chart hit ever heard on a home computer, with a near perfect rendition of Bomb the Bass's *Megablast* playing during the title screen. A reduced, yet recognisable and invigorating version provided background music during gameplay.

With the one gap in the Bitmap Brothers' arsenal now filled, the reviews of *Xenon 2: Megablast* were resoundingly congratulatory. Yet this partnership between the music and games industries was to have far further reaching repercussions than impressively high review scores. It would lead to a partnership that would reinvent the Bitmap Brothers into the kind of leading powerhouse capable of fully realising the industry changes that the founders had strived for since the beginning.

THE RENEGADES

Although the Bitmaps had entered into multiple game deals with Mirrorsoft (who released several Bitmap games under its Image Works label), the publisher had always acknowledged that a team like the Bitmaps wouldn't remain confined to one distribution network for long. When the head of Rhythm King Records, Martin Heath (an avid gamer who'd jumped at the chance to get involved with *Xenon 2*), met Eric Matthews, he learned a great deal about the state of the industry and fully identified with the Bitmaps' vision of setting the programmer free.

In 1990, they joined forces and founded Renegade Software to publish the Bitmap Brotners' games and also accept new material from other independent developers with the promise of placing the programmer and development teams at the fore of any promotion. In an interview with *ST Format*, Heath revealed all about his concept and what he thought of the software industry as a whole.

"It became apparent when I first met Eric that he wasn't too pleased with his publisher. Programmers are being treated as if they're idiots. I met some publishers, and most of the people running these companies are businessmen with nothing else to do but use their ability to make money. They're sympathetic to the programmers, but the decisions they make are often faulty. It was decided, as with Rhythm King Records, that the artists should get their just reward." Another like-minded visionary who was out to change the games world then, and for a while, they certainly did.

THE GAMES OF BITMAP

XENON

» The debut game from the Bitmaps that paved the way for a new age in gaming. Switching between a top-down racer and standard fare shoot-'em-up, *Xenon* went down a storm with punters and critics alike.

SPEEDBALL

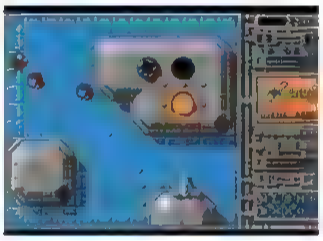
» To think this was almost a girly tennis simulator. *Speedball* combined football with *Rollerball* and reminded gamers that playing by the rules was actually a lot less fun than injuring opponents and bribing officials.

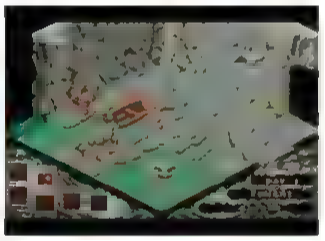
XENON 2: MEGABLAST

» Packed with so much detail it could make your eyes bleed, it's difficult to know what the best aspect of this rather gorgeous sequel is: the outstanding graphics or the incredible acid house soundtrack.

CADAVER

» Isometric games used to be a lot more fun than they are now, but still *Cadaver* holds its own with fans of the adventure genre; plundering depths of interaction that few, if any, 16-bit iso-explorers were able to manage.





GODS

» Although Hercules seems a little impotent in this platformer incarnation, the dazzlingly clean graphics make *Gods* a very welcome addition to the genre. The fact that there's no music (which, after *Megablast*, is almost unforgivable) is a kick in the nuts, though.

SPEEDBALL 2: BRUTAL DELUXE

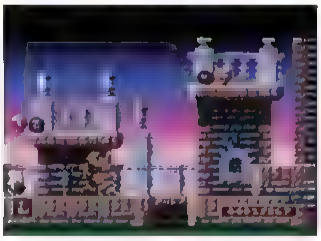
» For many, *Brutal Deluxe* is the pinnacle of not just the Bitmap Brothers catalogue, but computer and videogaming in general. A much larger pitch, twice the violence and triple the thrills, *Speedball 2* is the best game made by anyone ever.

MAGIC POCKETS

» Featuring the musical "talents" of Betty Boo (*Doin' The Do* – sheesh), this good looking platform game was robbed of credibility when it was featured as a phone-in game ("Up! No, I mean down! Err... left!") on *Going Live!* How the mighty fal

THE CHAOS ENGINE

» Getting right back on track, *The Chaos Engine* was a welcome return to Bitmap greatness. Featuring two-player, top-down *Ikari Warriors*-style action, the rich storyline and extravagant characters helped create a tough but genuine classic.



» [Amiga] *The Chaos Engine* characters oozed charisma, although the JS version had the Preacher changed to a scientist in order to avoid any controversy

The Bitmaps' own game, *Gods*, was the first title released under the Renegade label, soon followed by other classics such as *Sensible Soccer* (from industry legend Jon Hare, who now part owns Tower Studios with Mike Montgomery), *Fire & Ice*, *The Chaos Engine* and *Z*, to name but a few. Renegade continued to publish and promote developers until 1995 when it was bought out by Warner Interactive. Warner continued to use the label until 1997 when it was sold off to GT Interactive, and the Renegade name was regrettably discontinued.

"THE PARTNERSHIP BETWEEN MUSIC AND GAMES LED TO THE BITMAP BROTHERS' REINVENTION"

EXTENDED FAMILY

After years of generating successful and original intellectual property, the Bitmap Brothers team has unquestionably achieved its goal. The name is still synonymous with the highest quality of computer and videogames, and despite restructuring and alternative use of the name, the Bitmap Brothers is still under the watchful eye of Mike Montgomery, and the wealth of creative material at its disposal continues to be put to good use.

The most prominent talk about the Bitmap team was it re-imagining of *Speedball 2* for the PC, though Mike has intimated we can expect more from the Brothers team that has provided gamers with such remarkable and unforgettable titles for two decades.

"I still run the Bitmap Brothers, but with a much smaller team looking at various formats for my IPs. *Speedball 2* for Xbox Live Arcade was done together with John Phillips and Mark Coleman, both long-time Bitmaps, and we have more games in the pipeline. Watch this space!"

MEGABLAST

A testament to the dedication of the Bitmaps was their willingness and ability to uncover the chinks in the company's own armour, and when it was time for a sequel to their debut game, the lads knew the music had to be exemplary. To that end, they sought out the help of professional electronic musician Tim Simenon of Bomb the Bass (this writer's favourite band of all time, incidentally,). His recent chart hit *Megablast* from the awesome *Into The Dragon* album) was the perfect accompaniment to the space based shooter although the musician was no stranger to computer music after he'd used a C64 as a sequencer for Bomb the Bass's outstanding debut number one acid house hit, *Beat 'Dis*. While the tenuous Betty Boo connection to *Magic Pockets* wasn't quite the follow-up gamers or house music fans were looking for, the fact remains that Bomb the Bass and the Amiga are now connected for ever more.

THE CHAOS ENGINE 2

» Requiring something of a souped-up Amiga, *The Chaos Engine 2* filled in a few blanks from the original, by splitting the screen horizontally to allow more freedom for the two players and bolstering up the graphics as well as the action. Nice.

Z

» Over four years in the making, *Z* features a massive war between red and blue robots. Not only is it a perfect introduction to the RTS genre (due to the ease of adoption), *Z* also appealed massively to fans of the genre with its intricate strategy and well-balanced AI.

SPEEDBALL 2100

» An unfortunate part of the *Speedball* lineage, an attempt was made to make the franchise 3D on the popular PlayStation console, but the lack of speed and coarse graphics robbed this awesome game of its beauty.

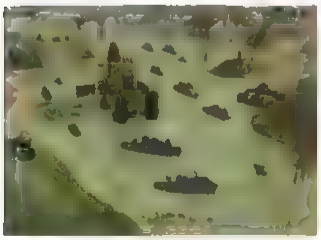
The new Speedball 2 now out on PC. Sadly it failed to live up to the brilliance of the original game despite its Bitmap sheen.

Z2: STEEL SOLDIERS

» A 3D sequel to the original RTS, *Steel Soldiers* is not without its fans, although its unfortunate arrival between hardware generations leaves it a little lacking. Still available and very playable, it's certainly a collector's item and well worth a couple of hours.

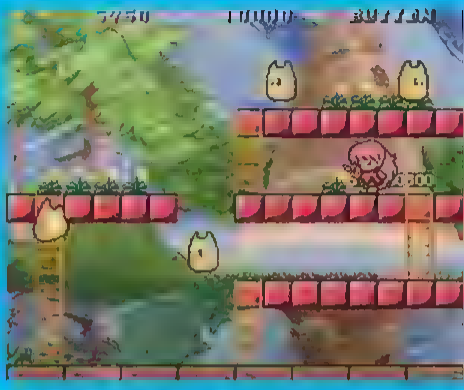
WORLD WAR II: FRONTLINE COMMAND

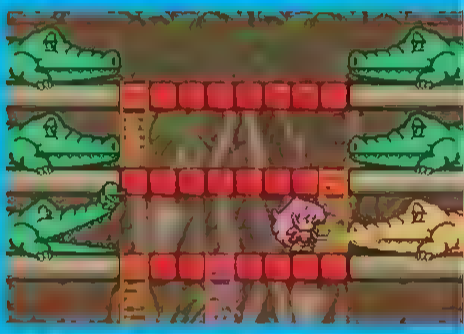
» This tactical war simulator featuring the events of D-Day proves how much the Brothers team learnt during its previous jaunts into the third dimension. Some beautiful environments adorn the game, though, without any Bitmap trademarks. Well received, if a little dry.



The new PC game certainly captures the look, but will the gameplay be intact?

ROD-LAND





Deceptively innocuous to look at, this powerful device turns your cute avatar into a deadly killing machine. Use with care.

Wet not exactly, but the ability to create ladders on the fly certainly makes your life a lot easier when you're zipping around each stage.

Play Super Breakout with your furry friends by sending these lethal power-balls bouncing all over the shop. It's like pinball, with squirrels.

Leave your enemies crunchy on the outside and toasty in the middle with this portable flamethrower. Rarely seen, but much fun to use.

INFLUENCES

> An unpretentiously old-school arcade game with bags of charm

THE CONVERSIONS

How the various versions compare

1 AMIGA/ATARI ST

BEST VERSION

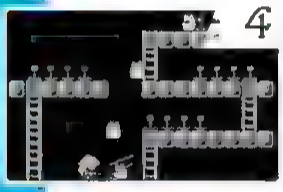
These two ports are nigh-on identical, so we've lumped them together. By far the closest to the arcade game, both visually and aurally, they're the definite high-point of Storm's conversions, and play like a proverbial dream. Pure class.

2 COMMODORE 64

Steve Snake's excellent C64 port is one of the finest coin-up conversions on the machine, right up there with *Bubble Bobble*. Retaining the original's playability, the sprites and animation are remarkably true to their arcade counterparts. A truly impressive port.

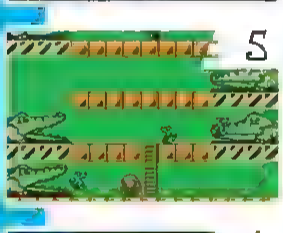
3 GAME BOY

The GB version is surprisingly good and, amazingly, is actually very close in feel to the 16-bit versions. For clarity, each level has been blown up to about four times the size of the Game Boy's screen, scrolling as you move around, allowing for larger character sprites.



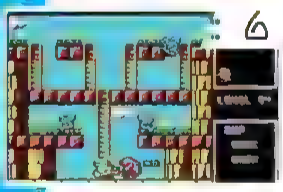
4 ZX SPECTRUM

While the CPC version has all the speed of an anaemic snail, the Speccy 128 release moves at a pace that can sometimes feel a little too quick. Still, it's a great conversion, and the monochrome visuals replicate the charm of the arcade game well. A very solid effort.



5 NES

Ported by Simon Pick, of *Daredevil Dennis* fame, this outing is another very playable conversion. Enemy behaviour has been tweaked slightly and the bees now shoot lightning bolts at our unfortunate heroines. The groovy soundtrack, by 'Spicko' himself, is also worthy of mention.

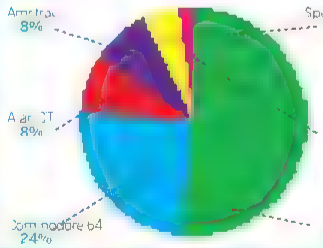


6 AMSTRAD CPC

WORST VERSION

Unfortunately, the Amstrad conversion suffers from an unmistakeable sense of sluggishness compared with its 8-bit peers. Although the graphics retain the vibrant colour and charm of the arcade, they suffer from a noticeable lack of definition. Bah.

FORUM OPINION

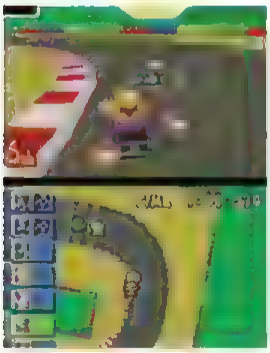


"The Amiga version by a universe mile. Best graphics, best gameplay, was fast and 'quite simply brilliant' ((c) david darling)" – **JetSetWilly**

"I was very impressed with the ZX Spectrum conversion. Although there is a lack of colour in the game, the sprites are very well done" – **yethboth**

THE COMPLETE HISTORY OF MARIOKART

WHEN SUPER MARIO KART APPEARED IN 1992 IT PROVED THAT THE MOUSTACHIOED PLUMBER WAS JUST AS COMFORTABLE ON ASPHALT AS HE WAS FACING KOOPA TROOPERS. **DARRAN JONES** REVS UP HIS ENGINE AND TAKES TO THE TRACK



» (DS) Tapping the bottom screen switches between either a close-up of the section of track you were on, or the strip in its entirety.

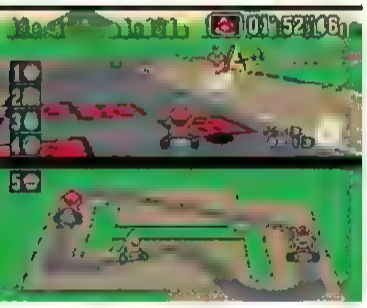
Mario is easily one of the most versatile videogame characters of all time. Despite being a plumber by trade we've never actually seen him lift a wrench in his 28 years of appearing in games. We have, however, seen him rescuing princesses, defeating giant apes, beating seven bells out of other famous Nintendo mascots, and taking part in seemingly every sporting event known to man – everything from golf to football. Perhaps our favourite Mario pastime though is when the plucky plumber decided to put rescuing Princess Peach on hold and instead participated in a bout of racing that not only kick-started a brand new genre and became one of the SNES's most popular games, but also grew into a massive worldwide franchise that's still immensely popular today.

That game, of course, was *Super Mario Kart*, a dazzling slice of old-school gameplay that transported Mario and some of his closest friends – and enemies – to a selection of brilliantly designed Mode 7 racetracks and proved that there was more to the portly hero than simply lobbing fireballs and bashing blocks.

Overseen by the legendary Shigeru Miyamoto, *Super Mario Kart* transported you into Mario's world, surrounded you with instantly recognisable places and characters from the Mushroom Kingdom and proved beyond a shadow of a doubt that Miyamoto was a living, walking videogame genius. After all, here was a game that was vastly different to anything else that the plumber had originally appeared in (although he'd already made a successful outing on the golf course) and yet it still felt just like a *Mario* game. Levels like Mario Circuit with its green pipes, the Boos circling the Ghost Valley tracks, the Cheep Cheeps that infested Koopa Beach, the way races ended and finished with Lakitu, who was also on hand to rescue racers who had fallen off the track; *Super Mario Kart* just felt instantly familiar and gave the impression that Mario and the rest of his rivals had been born to kart from their very inception.

If *Super Mario Kart*'s familiarity was critical to its success (it eventually sold over 8 million units to become the third bestselling game on the SNES after *Super Mario World* and *Donkey Kong Country*) then the perfectly balanced gameplay proved to be just as important. A wonderfully structured difficulty mode, starting off with simple 50cc karts, eased you into Mario's new pastime, while three progressively tougher cups – Mushroom, Flower and Cup, all consisting of five tracks each – slowly marked your transition from plumber on a mission to four-wheeled wonder. Once you've successfully completed the first 15 courses on the 50cc difficulty you can then progress to the faster, nippier 100cc and 150cc difficulty

"Super Mario Kart is a dazzling slice of old-school gaming"



settings and attempt the five tricky tracks that make up the final Special Cup (it's worth noting that the cups in later games consisted of just four tracks each).

It's a relatively simplistic formula to be sure, but the expertly crafted difficulty of each cc class is beautifully structured and offers a distinct new challenge that few other racers of the time were able to match. It should come as no surprise then to learn that the cc system has appeared in every *Mario Kart* game since (with the sole exception of *Mario Kart Arcade GP*).

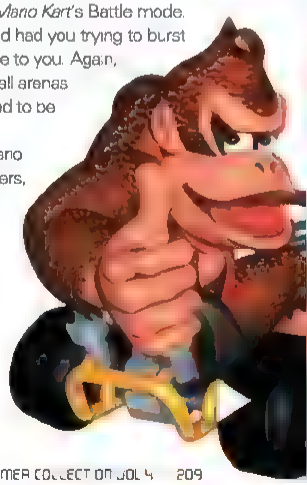
Arguably one of the most impressive aspects of *Super Mario Kart*, though, was its actual track design, which for many (us included) has never been as good in later games as it was in the original. Short and tightly designed, they constantly tested the player's mettle, featured some excellent shortcuts and boasted endless replayability. Little wonder then that we've spent more time on *Super Mario Kart*'s Time Trial mode than any other since (although *Mario Kart DS* comes pretty close). We've lost count of the many hours lost to Mario Circuit 1, Koopa Beach 1 and we can only guess how many appointments we were late for because we were too busy perfecting our laps on Rainbow Road, Bowser Castle 3 and Ghost Valley 1. While later editions of *Mario Kart* featured ghosts that you could race against, the simplicity and sheer cleverness of *Super Mario Kart*'s track designs still hold an inescapable allure for us.

If *Super Mario Kart*'s Time Trials were great fun, the main Grand Prix mode proved to be no less enjoyable, and while it only supported two players (something many clones were quick to improve on) it nevertheless proved to be excellent. When racing on your own the screen was split in two with the lower half either showing whoever was behind you or letting you see the entire course and your competitors' current positions. While racing was the order of the day, a variety of items, ranging from mushroom speed boosts to red homing Koopa shells were also on offer, which really allowed you to get the drop on your opponents. Far better balanced than in later editions of the game, certain items could give you a huge lead, but were never so broken that they made it impossible for you to ever get back in first place if you were languishing at the back of the pack.

Last, but by no means least was *Super Mario Kart*'s Battle mode, which pitted you against a second player and had you trying to burst their three balloons before they did the same to you. Again, it's an incredibly simple concept but the small arenas kept the action wonderfully tense and proved to be almost as fun as the Time Trial mode.

Super Mario Kart not only proved that Mario was one of gaming's most versatile characters, but set a precedent on the machine that no other racer (by Nintendo or otherwise) on the SNES was able to match. It remains many gamer's favourite game in the franchise – and rightly so – but Miyamoto and the rest of the *Mario* team were only just starting to get warmed up. .

When *Mario Kart 64* arrived on the scene in December 1996 (for the Japanese at least), expectation was



predictably, some might say impossibly, high. While some will no doubt argue that the original Super Nintendo effort remains the gleaming jewel in a sparsely fitting crown – the franchise includes just eight games – there can be no denying that *Mario Kart 64* set the groundwork for the *Mario Kart* we know today and a lot of elements from the N64 game have become recurring themes in the series. The cc difficulty modes were still in place, the number of laps you needed to complete permanently dropped from five to three (although Baby Park on *Double Dash!!* upped the ante to seven laps), the courses themselves tended to be a lot bigger, while coins no longer made an appearance. Four-player racing was now supported, ghost riders could be raced against in the Time Attack mode – providing you had a memory card – while it was also possible to unlock mirror tracks. Then there was the addition of the mini-boost (created by rapidly pushing left and right after a hop), which, when used correctly could be an amazing way of accelerating out of some of the tracks' many sharp corners and became a deadly tool in the hands of skilled players. The Special Cup returned, but this time there was also a Mirror mode, for all tracks, that was waiting to be unlocked.

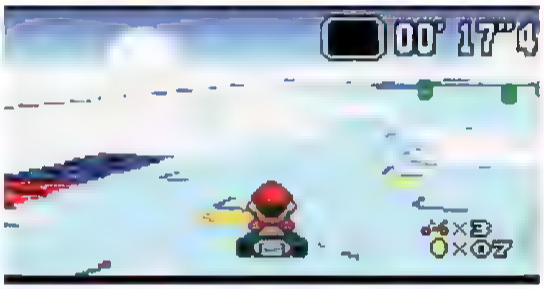
Originally known as *Super Mario Kart R*, another new addition to the series that has since become a *Mario Kart* standard was that the available racers were split into distinct categories – it's worth noting that the original *Super Mario Kart* manual uses Standard Performance (Mario and Luigi), Fast Acceleration (Peach and Yoshi), High Top Speed (Bowser and DK Jr) and Good Control (Koopa Troopa and Toad) – Lightweights, which included Toad, Princess Peach and Yoshi. Middleweights appeared in the form of Mario and Luigi, while Bowser, Donkey Kong and Wario – making his first appearances in the franchise – represented the Heavyweight division. Lightweights boast excellent acceleration and a solid top speed, but aren't so strong on corners. Middleweights are great for beginners due to their overall dependency in all areas, while the heavyweights lack good acceleration but grip to the track like flies on honey. Their huge size also makes them great for barging through smaller players and they tend to be the most popular choices when playing Battle mode.

The biggest difference to the franchise though was the transition from 2D to 3D, which greatly affected how the game played. While the Mode 7 courses of *Super Mario Kart* were brilliant, but in their design and execution, the move to the third dimension provided changes to the series that just hadn't been possible before. Huge ramps, rolling hills, deadly pits, curved corners that slowly graduated in height. It not only made a huge difference to how the series looked (although the racers and items remained as 2D pre-rendered sprites), but also to *Mario Kart 64*'s overall racing.

While *Mario Kart 64* set many standards for the series that have now become common practice, it remains (along with *Mario Kart: Double Dash!!*) one of the most controversial games in the franchise, not least because it was the first game in the series to dispense with the incredibly popular feather power-up (although screenshots from *Super Mario Kart R* suggest it was dumped at the last minute) and ushered in the reign of the Blue Shell.

Seen by many as nothing more than an unfair cheating device, the Blue Shell (which is spiked in both *Mario Kart 64* and *Super Circuit*) was only picked up if you were placed further back and will hurtle down the centre of the track taking out anyone that got in its way, until it reached whoever was in first place (this was changed to a flying blue shell in later editions that could unerringly fly into first place to leave an explosion that would take out nearby players).

Then there was the way that a computer player was barely troubled by fired weapons and could literally nip off again at full speed upon getting hit (a player on the other hand would come to a complete stop and have to slowly build up their speed again). Ultimately, *Mario Kart 64* divided the fans of the original game simply because it had now become obvious to many that the series was now being pushed as a party game to enjoy with your mates instead of the pure racing that had been so apparent in the first game. Of course, we ourselves feel this is utter tosh. The ability to race against your own ghosts and the mastering of the new turbo boost



» (SNES) Hitting ice blocks would slow you down, while the icy track was very slippery to negotiate.

» (N64) Bowser's Castle is a tough track on the N64 and features sharp turns and plenty of deadly Thwomps to avoid.

* (GameCube) As well as featuring dual karts, *Double Dash!!* was also the first game in the series to include replays.

WEAPON OF CHOICE

Banana
One of the most common weapons in the game, banana skins cause opponents to spin out of control and temporarily slow them down. They can be thrown ahead of the kart or dropped behind it. Braking upon hitting a banana skin (or pressing the trick button in *Mario Kart Wii*) can prevent a skid out.

Blooper
Bloopers first appeared in *Mario Kart DS* and blind all opponents behind the player by squirting a large amount of ink over their screens, so making it very difficult to see what's going on.

Blue Spiky Shell
Limited to *Mario Kart 64* and *Super Circuit*, this item appears whenever a player is in sixth to eighth place. If launched it follows the centre of the track until it hits whoever's in the lead.

Bob-omb
As well as being avoidable hazards on certain tracks, Bob-ombs can also be picked up and thrown at other racers. Upon landing they eventually explode taking anyone out that's near them.

Bullet Bill
While this bonus makes the player virtually indestructible for a few precious seconds, it's important that it's used in the right circumstances. After all, there's nothing worse than immediately careening off the sides of the smaller tracks when it runs out...

Golden Mushroom
Toad and Toadette's *Double Dash!!* special is a handy power-up that offers a continuous burst of speed. It's a great way of catching up with other players, but can lead to disaster if handled incorrectly.

Green Shell
When fired directly ahead of the player it will travel in a straight line until it ricochets off the side of the track (or an object). After five such ricochets the shell disappears. Also comes in sets of three.

Item Box
These are essential to the *Mario Kart* series as they hold the other power-ups. Flat question marks in *Super Mario Kart*, they took on a third dimension for subsequent *Mario Kart* games.

Mushroom
Available in either singles or sets of three, these very handy power-ups give you a quick boost of speed. Used effectively they can make or break where you end up finishing in a race.

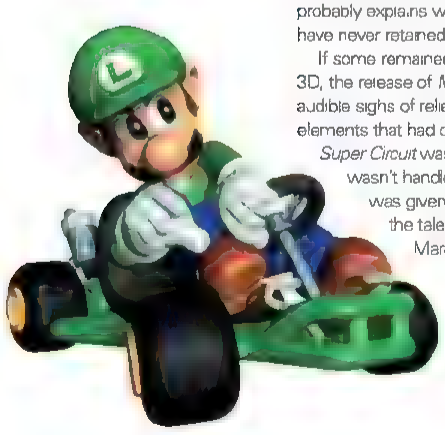
POW Block
Exclusive to *Mario Kart Wii*, this item takes out anyone that's in front of it when it goes off, but doesn't damage those behind it. Needless to say, there's no point using this if you're in first place.

Red Shells
First appearing in *Super Mario Kart*, Red Shells will immediately home in on whoever is ahead of the player in possession of the shell. If picked up in a set of three they can be used as a handy barrier (just like green shells).

Starman
An excellent power-up that makes you temporarily invincible, as well as giving you a temporary speed boost. You'll only get it if you're placed sixth or lower, however.

Thunderbolt
An excellent little item that shrinks (and slows down) all the other racers on the track, allowing you a nice advantage. Its effectiveness changes depending on the game you're playing, but this is still well worth picking up.

"Mario Kart 64 really divided fans of the original game"



– powersliding has been in the series since *Super Mario Kart*, but *Mario Kart 64* was the first time using it gave you a benefit – meant that single-player racing was just as exciting as it had ever been. Nevertheless the dye had been cast for the rest of the series, which probably explains why certain people feel that more recent outings have never retained the pureness of the 16-bit original.

If some remained disappointed by the franchise's transition to 3D, the release of *Mario Kart Super Circuit* in 2001 was greeted by audible sighs of relief from those who had been upset with the unfair elements that had crept into *Mario Kart 64*.

Super Circuit was also the first game in the *Mario Kart* series that wasn't handled exclusively by Nintendo, as Intelligent Systems was given the keys to the precious licence. Needless to say, the talented Japanese developer did not let Nintendo, Mario or fans of the series down.

Although *Super Mario Kart*'s excellent feather remained annoyingly absent from the game and the blue, spiked shell remained frustratingly present, *Super Circuit* represented a refreshing return to form for the series that once again saw the focus shift from frenzied, party play to the time trials and pure racing of *Super Mario Kart*.

Of course, part of this change could have possibly been down to the change of developer or even to the fact that *Super Circuit*'s admittedly excellent multiplayer mode just wasn't that readily available to most players. Four Game Boy Advances, four copies of the game and relevant leads were all needed to get the full *Super Circuit* experience, so the lack of resources meant that many would instead focus on *Super Circuit*'s single-player modes.

Luckily the single-player elements had been suitably beefed up and the end result was a title that was as deeply layered as any onion and would take months of bus rides to fully complete. Although the eight racers from *Mario Kart 64* were all present and correct there were still plenty of new elements to consider as you hurtled round brilliant tracks like Shy Guy Beach and Cheep Cheep Island.

The most obvious was the addition of a fifth cup (the Lightning Cup) and the ability to receive a powerslide boost by simply holding down the hop button – no doubt because waggling away on the Game Boy Advance's tiny D-pad would have been a nightmare. Coins also returned for a second hooray but now they held a more important role than simply boosting your top speed as they were also used to unlock the greatest addition to the *Mario Kart* series – namely the return of classic tracks.

Once you'd completed a set of cups and then raced through them again while collecting 100 coins, you came to what was arguably *Super Circuit*'s greatest asset, the ability to play through all 20 tracks from *Super Mario Kart*. Recognising not only the fans who had been

THE COMPLETE HISTORY OF MARIOKART

» (GBA) Get hit by an item or enemy and you'll either spin out and come to an annoying stop that can take an age to recover from.

» (N64) Rainbow Road in all its gaudy glory. It's the last track in each version of the game and is also one of the toughest.

» (GC) Certain fans of *Mario Kart* will argue that the multicart racing in *Double Dash!!* is the best in the series. We wouldn't go that far, but it is good fun (if a little unfair).

"Super Circuit's greatest asset was the 20 tracks it took from Super Mario Kart"

upset with the direction of *Mario Kart 64*, but that the original game itself was a true classic, Intelligent Systems and Nintendo's decision to include those 20 classic raceways is something we're still eternally grateful for. Yes, there were a few subtle alterations – the absence of the feather, for example, meant that you'd never be able to obtain the same scores you had tirelessly achieved on the original SNES game – but it was a fantastic inclusion that quickly became a series standard. Arguably one of the greatest additions to any new *Mario Kart* game these days is seeing just how classic tracks will translate over to the new games. It's a great inclusion and one that we wish other games would adopt. It should be noted, however, that no matter how many times the original tracks have returned, they've never been quite as good as they were on the SNES (another indication of the game's utter brilliance).

Big Nintendo franchises follow their latest machines as surely as night follows day, so there was little surprise from the gaming community when Nintendo revealed that an all-new *Mario Kart* experience would be appearing on its GameCube.

Mario Kart: Double Dash!! proved to be the boldest outing for the franchise yet, and while it appears to now share the same love/hate affair that *Mario Kart 64* still invokes, it nevertheless remains a great addition to the popular franchise. For the first time ever, it was now possible to play in huge – for *Mario Kart* at least – eight-player versus games (or 16 players with two players per kart in a LAN setup if you wanted to get really stupid), which were more intense and hectic than ever before. It also proved once and for all that skill was not held in high regard by Nintendo and that fun was the ultimate aim of the game. Race position could constantly switch and change at the press of a button, the infamous blue shell was now more devastating, annoying than ever, while the emphasis on wider tracks meant that they weren't as challenging (and therefore less interesting to race on time trails) as those from *Super Circuit* and *Super Mario Kart*.

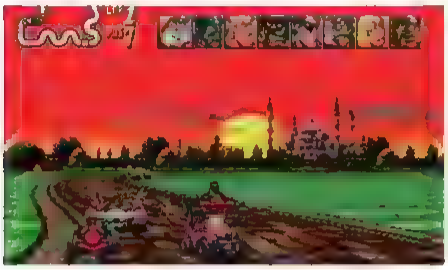
The biggest change to the series was that each kart could now support a total of two racers – one to drive, the other to use items – the original roster of eight characters had swollen to a more respectable 14, while unlockable characters, a first for the series, were also available. It was also possible to choose a different kart at the beginning of each race. Split into the now-familiar weight classes of Light, Medium and Heavy, eight carts were initially available, with another 13 included as unlockable extras.

As with previous games in the series, *Double Dash!!* included plenty of new additions to the core *Mario Kart* gameplay, although for many these new tweaks weren't necessarily for the better. One of the biggest and most fundamental changes was that it was no longer

SEND IN THE CLONES Just like Mario Kart, only not...

Street Racer
Year Released: 1995 **Featured System:** Mega Drive

This effort from Ubisoft and Vivid Image was a flop on its original release, which is a pity as it's good fun. The bland characters were very forgettable, but the included tracks were pretty good fun and there were some crazy weapons, too. Best of all was the multiplayer mode which allowed eight players to race at one time.

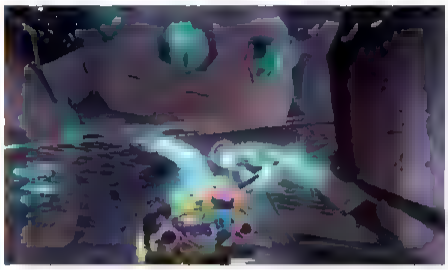


Crazy Racing Kart Rider
Year Released: 2004 **Featured System:** Windows XP

Kart Rider is a huge, online Korean multiplayer kart racer that earns revenue by selling virtual items online. There's a whole host of gameplay modes on offer, including an excellent scenario mode and a fun take on capture the flag. Sadly the Western beta has been taken down with no mention to when it might come back.

Crash Team Racing
Year Released: 1999 **Featured System:** PlayStation

The last *Crash* game original developer Naughty Dog worked on before joining Sony, *Crash Team Racing* is a solid kart racer with a fun multiplayer, a decent single player mode and plenty of wacky characters. Track design is solid and varied, meaning PlayStation owners were able to offer a two-fingered salute to N64 fans.



Diddy Kong Racing
Year Released: 1997 **Featured System:** N64

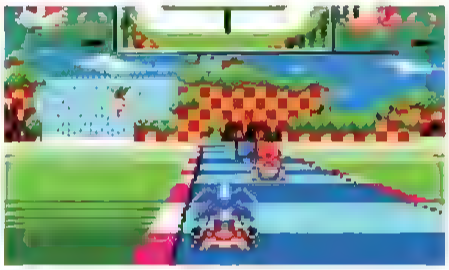
For many, *Diddy Kong Racing* is their favourite racing game on the N64. Published by Rare instead of Nintendo, *Diddy Kong Racing* has excellent visuals and a huge sprawling adventure mode that trounces *Mario Kart 64*'s single player outing. One of best karting games around without Mario, there's even a DS update available.

Konami Krazy Racers
Year Released: 2001 **Featured System:** GBA

Konami Krazy Racers proved to be a perfectly adequate *Mario Kart* clone until *Super Circuit* appeared on the machine. Featuring 12 Konami characters, it boasts some fun tracks based on classic Konami games, decent power-ups, several enjoyable multiplayer modes and bright and cheerful visuals.

Sonic Drift
Year Released: 1994 **Featured System:** Game Gear

Sega obviously felt that anything Nintendo could do, it could do better. *Sonic Drift* is perfect proof that that doesn't apply to ripping off *Super Mario Kart*. Despite featuring Sonic and Tails, the pap controls, headache inducing visuals and its slow pace meant it was worth leaving on the shelf. The sequel wasn't much better either.



possible to drag an item behind your kart (although this reappeared in *Mario Kart Wii* and offline *Mario Kart DS*). Since its inclusion in *Mario Kart 64*, trailing items behind you was an excellent strategy for helping to secure your lead – the item would take the brunt of any attack, leaving you to carry on in the lead... with scarce protection from other items there was now a huge element of luck, simply because good racing didn't always come into it. Indeed it's not unheard of for players to simply hold back in the lower positions to avoid the worst attacks and then attempt to surge ahead on the final lap, which is certainly practical but doesn't necessarily make for fun gameplay.

However, players could dislodge and steal items from opponents through careful driving as well. Known as barging them in the side.

Other new additions to the core gameplay included a new All Cup Tour, which allowed you to race through all 16 tracks in a random order (although Luigi's Circuit is always the first you race on and Rainbow Road the last), and – for the first time ever – new Battle modes, which turned out to be pretty good fun. In addition to the standard Balloon mode that's become a *Mario Kart* standard, there's Bob-omb Blast, which has you hurling bombs at each other and (our favourite) Shine Thief which has you all tearing after a Shine and trying to keep hold of it for as long as possible. Needless to say, the small enclosed tracks that are available ensure that the gameplay constantly remains fast, furious and, above all, fun.

Considering the anarchic, fast-paced gameplay that the *Mario Kart* series boasts, it's somewhat surprising that it took 13 years for an arcade version to get released. Created in collaboration with Namco and utilising the Triforce Arcade Board – which itself came about due to a union between Nintendo, Sega and Namco – it's an excellent addition to the home series that consisted of two huge twin cabinets that could be linked together for some serious four-player action.

Roughly based upon *Mario Kart: Double Dash!!* (although the dual player karts no longer make an appearance), the most notable aspect of *Mario Kart*'s first arcade outing was that it heralded the arrival of three exclusive Namco characters, Pac-Man, Mrs Pac-Man and Blinky a fourth Mametch from the Tamagotchi franchise, appears in the sequel – who, like the rest of the *Mario Kart* crew have their own strengths and weaknesses. Pac-Man turned out to be a particular favourite of ours. Other touches to the classic franchise included the ability to take a photo of your own face using the NamCam, which imported you into the game – therefore predating *Mario Kart Wii*'s Mi option by a good three years – a host of new weapons, ranging from custard pies to tacks and needle bombs, the return of collecting coins and using them to slowly increase your overall top speed and the use of a magnetic card, which could only be used on certain machines.

Utilising the same approach that had worked so well for a variety of arcade beat 'em-ups, like *Tekken 6* and *Virtua Fighter 5*, the magnetic card could be used to save your progress and to store up collected items, as well as saving all your best times. It also kept track of the number of coins you'd collected – which could be spent on new

THE COMPLETE HISTORY OF MARIOKART

items any cups and classes you'd completed, your overall rank and a password allowing you to get on to an online ranking leaderboard.

Interestingly, the standard 50 100 and 150cc difficulty modes weren't actually included in *Arcade GP* (although they did appear in the 2007 sequel). Instead, six stages were available – Mario, Donkey Kong, Wario, Pac-Man, Bowser and Rainbow (the latter only being available once the first five had been fully completed) – all consisting of four tracks each. Another nice touch with *Arcade GP* was that completing all the tracks (no small feat in itself) allowed you to unlock a brand new challenge mode that consisted of a variety of wild and wacky tasks to complete, which was later carried over to *Mario Kart DS*. There were also traditional Time Trial modes and the four-player versus mode to compete in as well.

Sadly, for all its little tweaks and touches, *Mario Kart Arcade GP* and its sequel are easily the weakest games in the franchise and simply employ all the little gippy elements from the series. It's insanely expensive if you want to play it properly, the vast majority of the available tracks aren't a patch on the home versions that are available, while the rubber-band effect that's in place – the lead character becomes slower and the last character speeds up in order to keep races close – isn't as well implemented as it is in other racers. It's certainly worth experiencing, if only so you can play as Pac-Man and use his Namco-game-inspired power-ups, but the two games are nothing more than curiosity pieces and don't really do this fun franchise justice.

If *Mario Kart Arcade GP* and its sequel proved to be rather lacklustre, at least Nintendo managed to make amends with the excellent *Mario Kart DS*, which took the brilliance of *Mario Kart Super Circuit* and combined it with the very best elements of the home versions. It was also the first version of *Mario Kart* (and only the second Nintendo DS game) to include an official online mode, which not only proved to be surprisingly stable, but also became plagued with the infamous 'snaking' (also known as 'straight-stretch mini turboing', where the player constantly uses the turbo to tear around the track, even on straight sections) that ruined the excellent *F-Zero GX* for so many players. (While it wasn't online, there were online time trial contests using game-generated codes you inputted into the official website.)

Even snaking couldn't ruin what is arguably one of the best additions to the franchise, however, and while many of the older retro tracks that had been included – especially from *Super Mario Kart* – weren't quite as effective as they were on their original versions (something all later versions of *Mario Kart* suffer from to some degree), this was another jam-packed addition to the series that added plenty for the player to sink their teeth into.

Two Grand Prix modes (one consisting entirely of retro tracks) were available (with the now standard 150cc Mirror mode as an unlockable) and it was possible to play Battle mode on your own, with both Balloon Battle and Shine Runners (where you have to catch as many Shine sprites as possible). Perhaps one of our favourite improvements was to the Time Trial mode, which not only allowed you to store ghosts on all 32 available tracks, but also let you import friend's ghosts (via Wi-Fi) to your own cartridge to compete against. If that wasn't enough, there was also a massive new Missions mode, which greatly expanded upon the challenges first introduced in *Mario Kart Arcade GP*. The six stages each consisted of eight

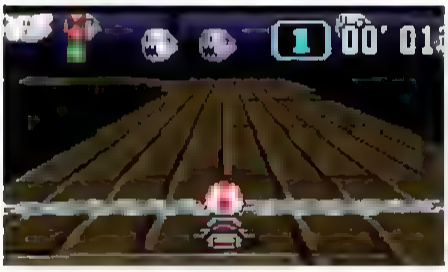
TRACK ATTACK

There's a huge amount of classic tracks in the Mario Kart series, here are some of our favourites...

Ghost Valley 1

First Featured in: Super Mario Kart

One of the best tracks in the entire *Mario Kart* series, simply because it allows you to really have some fun when using the feather. There's a tiny little piece of track which, although tricky to navigate, can put you a massive leap ahead of the competition if you time your jump correctly.



Wario Stadium

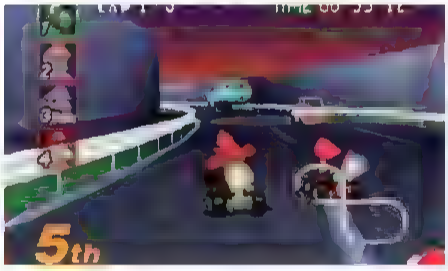
First Featured in: Mario Kart 64

Looking like something out of *Excitebike 64*, this is a superb track (if a little lengthy) because it features one of the meanest tricks in the series. When your opponents are on the giant ramp use the thunderbolt to shrink them, they won't have enough speed to clear the jump and they'll have to go around again.

Toad's Turnpike

First Featured in: Mario Kart 64

Another track that features a simple design – in this case a figure eight shape – Toad's Turnpike is still exceptionally fun to actually race upon. The difficulty here comes from the sheer amount of traffic on the road. Needless to say things get even harder when the difficulty level increases...



Sky Garden

First Featured in: Super Circuit

Sky Garden is an excellent little track set high above the ground, which uses clouds both to slow down players and also as handy barriers. Carefully used mushrooms can be abused to rocket you across some of the track's ramps, while the course itself reappeared in *Mario Kart DS*.

Yoshi Falls

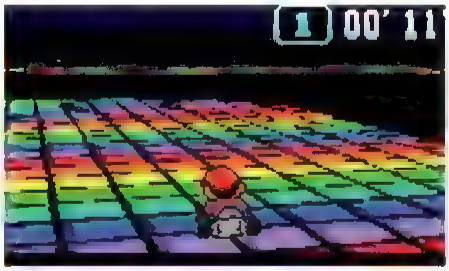
First Featured in: Mario Kart DS

Boasting three waterfalls (the second of which is far too long to safely traverse), Yoshi Falls is yet another simple track that really comes into its own during multiplayer races. The best part about this course is the ability to send your opponents flying due to the lack of barriers in place. Great fun.

Rainbow Road

First Featured in: Super Mario Kart

With its devilish turns and eye-meltingly hypnotic colours, the final track of the Special Cup stage is loved and bathed in equal measure. While variations of Rainbow Road have featured in virtually every *Mario Kart* game since, it is the version in *Super Mario Kart* that remains our favourite.



THE ORIGINAL RACERS

32 individual characters have now appeared in Nintendo's popular karting series, but what about the original eight racers?

Mario

Karts Owned: 17 • **Home Tracks:** Mario Circuit, Mario Raceway • **Strengths:** Standard Performance

The star of *Mario Kart* is also the best all-rounder – although not necessarily the choice of more experienced players. His original kart was well balanced in terms of speed, handling, weight and acceleration – the perfect choice for beginners.

Luigi

Karts Owned: 16 • **Home Tracks:** Luigi's Raceway • **Strengths:** Standard Performance

Mario's brother is another excellent choice for players that are just starting out. Unlike his brother he actually has a slightly better top speed and better handling. The downside though is that his drifting is nowhere near as good as Mario's

Peach

Karts Owned: 16 • **Home Tracks:** Royal Raceway, Peach Circuit, Peach Beach, Peach Gardens, Moonview Highway • **Strengths:** Fast Acceleration

She may be getting constantly rescued in Mario's platforming outings, but Peach is a pretty good racer in Super Mario Kart who's normally first off the starting line in any race.

Toad

Karts Owned: 16 • **Home Tracks:** Toad's Turnpike, Toad's Factory • **Strengths:** Good Control

Being rather small in stature it should come as very little surprise to learn that Toad's handling is very, very good. His lack of weight means that he's also very good when it comes to quick starts and a demon on the shorter tracks

Bowser

Karts Owned: 16 • **Home Tracks:** Bowser's Castle • **Strengths:** High Top Speed

This big brute of a kart racer has the slowest acceleration in the game and is constantly left behind by his peers. Worry not though as his dense weight means that he's excellent on corners and that he has an impressive top speed

Donkey Kong Jr

Karts Owned: 16 • **Home Tracks:** DK's Jungle Parkway, DK Summit, DK Pass • **Strengths:** High Top Speed

With his bulky physique, broad shoulders and great girth, Donkey Kong Jr (he's grown up in the later games, hence the dropping of Jr) is a furry equivalent to Bowser. Be warned though, like the King of Koopas he's best left to the experts.

Koopa Troopa

Karts Owned: 13 • **Home Tracks:** Koopa Beach 1, Koopa Beach 2, Koopa Troopa Beach, Koopa Cape • **Strengths:** Good Control

Koopa Troopa is the evil – is he evil or just misunderstood – equivalent to Toad and he shares the same excellent handling as his stumpy pear. Nippy and fast, he's great for skilled players

Yoshi

Karts Owned: 16 • **Home Tracks:** Yoshi Valley, Dry Dry Ruins, Yoshi Falls • **Strengths:** Fast Acceleration

Just like Peach, Yoshi is pretty good in the acceleration department and can quickly tear apart times on some of the shorter tracks. His general lightness though means that he's a little poor on corners and lacks a decent top speed

» (GBA) With the feather no longer an option, it's down to speed ramps to help you clear larger gaps in the tracks.

» (N64) Although the tracks themselves are 3D, the racers in *Mario Kart 64* are all pre-rendered sprites.

small challenges ranging from racing through correctly numbered gates to collecting coins and smashing crates, and culminating in a boss battle that saw you taking down a huge enemy (often with item support). A seventh, harder set of challenges, then becomes available upon completing the others.

Gameplay additions saw a starting choice of two distinctly different looking karts for each player – it's eventually possible to unlock a total of 32 karts that can be used by any player – and 'drafting', which enabled you to build speed off the racer in front of you, while three new racers also joined the ranks: Dry Bones, R.O.B. and Shy Guy (who only appears in downloadable play). There's even a small drawing program that allows you to create simplistic emblems for use online. Basically, *Mario Kart DS* is easily our favourite game in the franchise after the original, as it takes all the fun of the later games, but also features all the racing elements that were so enjoyable in the SNES original.

The last addition to the *Mario Kart* canon was released last year on the Wii and, while we're not quite as enamoured with it as we were with *Mario Kart DS*, it remains an enjoyable add-on to the franchise that once again brings new additions to the classic gameplay that has been entertaining gamers now for 17 years.

Online play was now fully available (and pretty flawless it is too, despite Nintendo's relative infancy in this aspect of gaming) and supported 12 players, bikes are included for the first time in the franchise, allowing you to wheelie, which increased your top speed but made it far harder to turn, the benefits of snaking were nullified (you can snake but there's no real point most of the time, as people abuse the bike's wheelie instead usually), and there's even a simple text chat mode that allows you to send pre-written messages to other players online as you're racing them. Tricks were also added to the *Mario Kart* repertoire and successfully pulled off stunts, which were easier to perform on the new bikes, would reward you with a handy mini-turbo, while players were also able to import their Miis into the game to compete against Mario and the other 23 characters that are eventually available. The biggest addition to the game, though, was the brand new control method.

While traditional *Mario Kart* controls can be accessed via the Classic Controller, Remote and Nunchuk or a simple GameCube pad, *Mario Kart Wii* was created to get the most out of the Wii's Remote. By holding the Remote horizontally you're given a surprising amount of control over the on-screen action, which improves dramatically if you use the steering wheel that *Mario Kart Wii* comes with.

Mario Kart's credentials may have changed over recent years – although the superb DS outing is a brilliant return to the glorious SNES days of old – but the series remains excellent fun to play, a testament to both Nintendo's continual crafting of the franchise and because Miyamoto and his time got so much right in the first place. And let's face it, how many franchises manage that?

(Special thanks to Mat Allen for his invaluable help.)

BLACK TIGER

PUT A TIGER IN YOUR GAMING TANK

PUBLISHER: CAPCOM
RELEASED: 1987
GENRE: PLATFORMER
FEATURED HARDWARE: ARCADE
EXPECT TO PAY: £90 (PCB BOARD)

HISTORY

For all the recent gushing over the latest 3D reworking of the *Prince Of Persia* franchise, there is still something satisfying about going back to basics and hacking and slashing your way through scrolling, bonus-packed 2D levels.

While contemporary games like the new *POP* are undoubtedly gripping in their narrative and amazing in their beauty they can overlook the need to frustrate and challenge the player. It is precisely why revisiting the medieval setting of *Black Tiger* has been like a breath of fresh air those moments of youth spent in the dank arcades with a bagful of ten pence pieces and a host of ace platformers being not so much relived

Relatively unknown and yet brushed off and re-released on one of those Capcom PSP retro collections, *Black Tiger* was the spiritual successor to *Ghosts 'N Goblins*. And you died a lot. Unlike some of today's games death was a reality. You hopped around the eight way levels seeking encouragement reward and more than a few bad guys to kill, while avoiding being slayed yourself.

Collecting coins would enable you to purchase better weapons and armour and get you keys for the treasure chests. There was a solid emphasis on exploration too smashing at walls to reveal hidden goodies. All the while your head would spin as much as some of the animation and your brain would move as fast as the main character's little legs.

Yeah, it was repetitive. Yeah, the bosses could be annoying, please don't change the direction of the controls. Mr Bad Dude? Yeah, the sound could grate. And of course, amid all of this action, there wasn't much of a story... but it didn't suffer from it. The plot was something to do with dragons and the need to kill them to save the world, the universe and possibly populations beyond.

At the end of the day, the need to progress, to get to the next stage, is all encompassing, and the simplicity of having a guy with a whip style weapon, a few daggers and some effective armour worked a treat. Simply wonderful.

VITALITY
TIME
VITALITY
01192
VITALITY
01986
TIME
VITALITY
01986
VITALITY
01844
TIME
VITALITY
00694

The Making Of...

ROBOTRON: 2084

A favourite of gamers old and young and one of the most relentless and frenetic shoot-'em-ups ever devised, Robotron: 2084 is a first-rate creation. Craig Grannell talks to designer Eugene Jarvis about his game's path from Berzerk! wannabe to timeless classic, and the epiphany that resulted in a revolutionary control system that's still in use today

IN THE KNOW

» **PUBLISHERS:** WILLIAMS ELECTRONICS

» **DEVELOPER:** EUGENE JARVIS FOR WILLIAMS ELECTRONICS

» **RELEASED:** 1982

» **PLATFORMS:** ARCADE (LATER CONVERTED TO VARIOUS HOME SYSTEMS)

» **GENRE:** SHOOT-'EM-UP

» **EXPECT TO PAY:** £750+ FOR AN ORIGINAL CABINET

It's the early Eighties and *Defender* has been released to much acclaim. Designer Eugene Jarvis, who initially based his iconic horizontal blaster on *Space Invaders* and *Asteroids*, is playing another early title when inspiration strikes for perhaps his most famous creation – *Robotron: 2084*. "*Berzerk!* was amazing, but I got frustrated playing it, because you had to move towards enemies to shoot them. As they closed in it was hard to kill them without them killing you," remembers Eugene. "One day, I realised if you hold the fire button down, your player remains stationary, but you can still move the joystick to fire bullets."

For Eugene, this was a 'Eureka!' moment. "A lightbulb went off in my head – 'the joystick fires the bullets'. I then thought why not have two joysticks – one to move and one to fire? It was so obvious – such a natural control method!" In one fell swoop, Eugene devised a breakthrough gaming mechanic for his new title, and one that perseveres to this day – although in typically modest fashion, he notes that if he hadn't thought of it, "someone else would have".

The control method was duly worked into a game Eugene had already started, which, like *Berzerk!*, was based on *Robots*. "Initially, you had to get robots to collide and destroy each other, but that was too passive – after playing *Defender* and *Stargate* for two years, you gotta kill things," he laughs. "So that's when the 'shooting joystick' came into play."

By utilising a dual-joystick approach, Eugene says his game became more life-like, enabling you to retreat from a foe while shooting at it, adding freedom in terms of firing. However, there was little freedom in the environment, with *Robotron* confining you to a single screen – a retro decision even in 1982, especially following *Defender*'s scrolling universe. "*Robotron*'s beauty is in its confinement and intensity," argues Eugene, likening it to *Space Invaders*, but with enemies approaching from all angles. "When we first tried this, it really grabbed our attention – there were no safe areas, because foes were coming at you from everywhere."

With such an escalation of warfare, other components were needed. First, a stronger enemy required a stronger player, to ensure balance of power, hence the plentiful projectiles the player's weapon spews. Secondly, a rescue theme was introduced.

» [Arcade] Eugene wanted a story for *Robotron*. You must save the last human family from robots.

» [GBA] The GBA's lack of buttons means its conversion is a case of 'pick up and play – and then putdown again'. A DS version, on the other hand...

"THEY'RE ROBOTRON'S EVIL OTTO. IT'S COOL HAVING AN INDESTRUCTIBLE ENEMY – THEY ADD INTEREST TO THE GAME, BECAUSE YOU HAVE TO GO AROUND THEM" EUGENE JARVIS ON THE GREEN HULKS

transplanted from *Defender*. "This was added so the game wasn't just about killing everything," says Eugene. "We got to tell a story, with different characters, and used rescuing clones of the last human family for progressive scoring." He explains that once you're up to 5,000 points, you become motivated to try for more, since 25,000 points provides an extra life. "The character of the game changes – you become almost suicidal in order to grab humans!"

Further gameplay richness is provided by *Robotron*'s cast, which grew as the game was developed. First up were static, deadly Electrodes and simple-minded GRUNTs (Ground Roving Unit Network Terminators), a foe that closely paid homage to the inspirational *Robots*. "GRUNTs were designed to make the player feel surrounded and trapped from all sides," says Eugene, adding that GRUNTs are simply programmed to take the shortest path to you – something that rapidly amplified the game's intensity. "I'd been working on the game for a few days when we got rudimentary GRUNTs going, and we said, let's play with ten. That was kinda fun, so how about 50? How about 100? It was killer, and the funny thing was that with the dual-joystick thing, we ended up blowing a path through GRUNTs when surrounded, returning to *Berzerk*-style shooting in the direction you're moving!"

In a sense, the Electrodes and GRUNTs shifted *Robotron* towards its main source of inspiration in another way, too. Although *Robotron*'s single screens lack walls, myriad enemies almost create a maze, albeit one that continually shifts; enemies appear randomly on screen at the start of each level, and the player has two seconds to take in the playfield and decide where to go. Another interesting element, according to Eugene, is the GRUNTs' speed. "They go towards you at an ever-accelerating pace, but are never faster than you. This gives you a chance, but GRUNTs cut corners and always close in on you."

According to Eugene, the next enemy designed, indestructible green Hulks that kill humans they collide with, were also inspired by *Berzerk*. "They're *Robotron*'s Evil Otto. It's cool having an indestructible enemy – they add interest to the game, because you have to go around them, although we helped the player out a bit by enabling you to fire at Hulks to temporarily keep them at bay."

At this point, no enemies fired projectiles of their own, and so the levitating Enforcer was devised. "We liked the idea of a levitating robot, and it was also cheaper than animating something walking," laughs Eugene. The Enforcer also continued a thread from *Defender*, providing the illusion of enemy intelligence via projective algorithms. "The simplest thing you can do is calculate the angle from the enemy to the player and shoot directly, but if the player's in motion, the enemy always

DEVELOPER HIGHLIGHTS

NARC (PICTURED)
SYSTEM: ARCADE
YEAR: 1988

DEFENDER
SYSTEM: ARCADE
YEAR: 1980

SMASH TV
SYSTEMS: ARCADE
YEAR: 1990

ROBOBUGS

Like *Defender*, *Robotron* has bugs that weren't discovered until the game was shipped, the most interesting of which is known as the Mikey bug. "Due to a programming error, when you enter a Brain wave, they're supposed to seek the closest human, but they all go after the same one – initially Mikey," explains Eugene. "If no humans are killed, they'll keep seeking the same one, and if you figure out where the Brains are going and keep that person alive, you can keep the Brains from reprogramming any humans. That's a key strategy for getting bonuses – keep the Brains on one person and you can get the maximum amount of 5,000 points for each human saved."

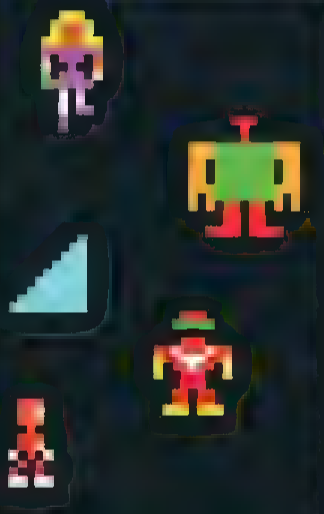
Elsewhere, hardware limitations caused another quirk: if Tanks fire 20 shots that don't hit anything, they decide to become pacifists and cease firing – a rare quality in the frenetic and ceaselessly violent world of *Robotron*!

» [Arcade] Tanks fire huge projectiles, adding what Eugene likes to call "a nice chemistry of shots".

The Making Of . . .
ROBOTRON: 2084

» [Arcade] Instead of having enemies explode in a shower of particles in *Robotron*, their scanlines fly apart.

» [Arcade] *Berzerk!* provided much of the initial inspiration for *Robotron*, although Eugene's game is faster and tougher.



misses," explains Eugene. "Therefore, we added random direction – instead of shooting directly at the player, Enforcers shoot within ten pixels of your location, and therefore might still hit you."

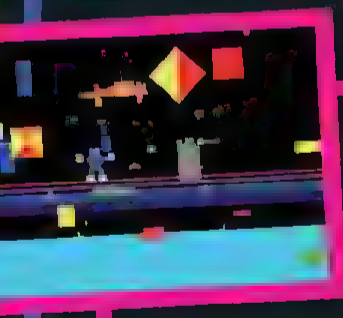
With some projectiles taking into account the player's velocity, thereby aiming at where you're heading, and having random acceleration to make their paths curve, you might swear they're sometimes seeking you, but that's not the case – they're just using parameters available when shots are made. Interestingly, because of the 'cheap form of division' used to determine distances between enemy and player, Enforcer shots always arrive in the same time-frame, regardless of distance travelled. "The further you are from an enemy, the faster the shots get, and so it's almost safer to be nearer the enemies," explains Eugene. Although counter-intuitive, this is a gameplay mechanic seasoned players exploit – as Eugene says, "If you try running into corners, life can be short, especially since projectiles that hit walls just follow their lines, funnelling into corners."

Eugene also decided to make Enforcer spawning rather different to that of GRUNTs and Hulks, utilising the concept of a monster generator, a key component of later games like *Gauntlet*. "The Spheroid was devised to deposit little embryos of Enforcers around the screen. Shoot the 'mother' and offspring not yet birthed also perish," explains Eugene. "But if you die, the generators reappear and birth more. You can get into this steady-state situation where you keep dying and they keep generating – it's like you can never get them out of the way, unlike in *Defender*, which always has a fixed number of enemies."

To keep the balance of power intact, Eugene decided to enable players to shoot enemy projectiles, adding an element of defence, but it wasn't long before another foe was added: Brains. These were considered master controllers, preying on humans, turning them into brainwashed Progs that incessantly hone in on the player. "Their defence is a cruise-missile projectile that seeks you out, but in a random fashion," says Eugene. "It sometimes goes away from you and comes back, seeking a random spot around you, often killing you in the process (laughs), but this adds suspense. As they come at you, you're not sure what's going to happen."

Robotron survived in this form for a few months, but Eugene's partner on the game, Larry DeMar, then announced he wanted another enemy, the Tank. "We needed something else to punish the player and take their money, and so we created the Tank, which shoots what are essentially high-velocity ping-pong balls at you that bounce around the sides of the screen," says Eugene.

With a large selection of foes, bullets and humans populating *Robotron*'s single-screens, and technology being limited, the game's graphics were understandably basic. It was vital to make each character distinct and ensure



BLASTING BLASTER

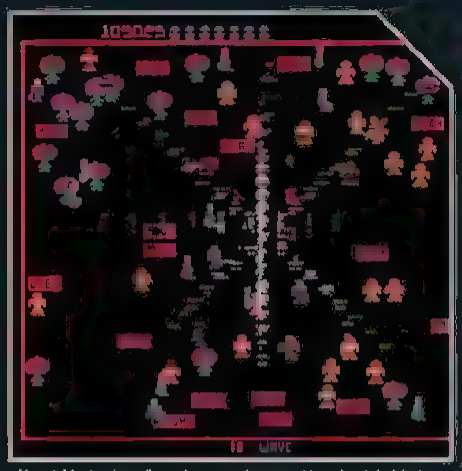
Although Eugene planned sequels for *Robotron*, *Blaster* became the only title set in the same universe. "It's trying to throw *Defender*'s gameplay into a 3D environment, to capture the rush of flying through space," explains Eugene.

Of his early games, Eugene considers *Blaster* the weakest, because of the inherent problems of 3D. "It's exciting, stimulating and emotionally captivating through the imagery, but the player has incomplete information, and poor manoeuvrability. You can't see threats behind you – you just have a cone of visibility. And so you get killed by things you never saw, which players consider unfair."

Happily, though, Eugene notes that he thinks the industry is finally over 3D. "They're like, 'You know what? A game doesn't have to be 3D! A game can be a game!' And that's great, because it's impossible to take some formats into 3D. Take *Pac-Man* or *Space Invaders*... or *Robotron* – put them in 3D and they simply don't work."

» [Arcade] The controversially bloody *Smash TV* finally took some of *Robotron*'s original concept ideas to the arcades in 1990.

» [VIC-20] No, you're not hallucinating – the VIC-20 really did receive a *Robotron* conversion. It's not bad either – just don't try running diagonally, unless you want to die.



» [Arcade] As the player dies and re-enters the arena, things already look bad.

enemies stood out. "The beauty of the black background is there's no clutter to distract the player," explains Eugene. "The game's all about the enemies, and the graphics were designed so you can see the contrast, even with dozens of enemies on screen." That said, *Robotron* does make one concession to visual impact, borrowing a trick from *Defender*. "We refined the explosions, separating a character's scanlines – as opposed to *Defender*'s particle explosions. How and where you hit an enemy defines where the lines go, which is very '*Defender*-esque', creating beauty and different patterns of explosions."

This fine-tuning and attention to detail resulted in a game that feels very complete, but Eugene says he always wanted to make *Robotron* sequels, mostly to implement the game's original vision. This included a world of mazes – a huge underground complex to explore, within which is a mastermind computer to destroy. "I guess *Smash TV* utilised some of those ideas, and with *Robotron* just the game became fun," considers Eugene. "It's an interesting school of game design – do what you can to get something running, and if that's fun, you're done. Rather than implementing everything from your vision, implement the simplest reduction. If it doesn't correspond to your original vision, who cares?"

Robotron's combination of simplicity and brutal, ferociously relentless action won plenty of fans, and it remains popular today, both in itself and as a source of inspiration for other designers. "I look at *Robotron* like chess – it has simple rules, but every game is different. With a simple universe and set of rules, you allow characters to freely explore them and take things to their limits," muses Eugene. And on the likes of *Geometry Wars*, he's unselfish and open: "It's awesome to see modern designers using the classic 2D *Robotron* format and exploring new play elements and concepts. There's a beauty in the gameplay and it's a viable, fun format."

Eugene confirms he's a fan in general of classic formats making a resurgence, and believes such games are beneficial to the industry. "The beauty of the retro-gaming movement is the recognition that the game is an art form and doesn't necessarily get obsolete just because it lacks the latest 3D motion-captured ray-traced graphics." He compares retro with punk-rock – stripping things back to basics. And although you wouldn't want to experience honed-down simplicity for your entire life, there's a purity and timelessness to classic, straightforward gameplay. "With *Robotron*'s gameplay, the beauty is in the limitations – you're stuck on one screen, and that confinement makes the game. If you could walk to somewhere else, it wouldn't be as much fun. You're trapped, and you have to fight," says Eugene. "A game is a reduction of life – being restricted to some little world that has its own rules. And the industry has finally recognised that graphics aren't everything – it's all about the game."

» [GBA] It's the GBA tribute to *Llamatron*, *Llamaboost*, which is like *Robotron* twice removed.

» [Lynx] The tiniest *Robotron* you ever did see, on the Atari Lynx. This version isn't entirely hateful, although the rotational firing controls get old fast.

NOLAN BUSHNELL

HE IS THE FATHER OF ELECTRONIC GAMING, THE FOUNDER OF ATARI, THE CREATOR OF PONG. AND, DESPITE A LIFETIME ASSOCIATION WITH VIDEOGAMING, NOLAN BUSHNELL'S PASSION FOR GAMES IS AS STRONG AS EVER. DAVID CROOKES TALKS TO THE MAN WHO TOOK GAMING TO THE MASSES - AND DISCOVERS WHY HE BELIEVES SOME MODERN GAMES ARE DEGRADING...

"My vision for Atari was a company which brought technology and consumer electronics to everyday Joe and Moe," says a proud Nolan Bushnell, casting his mind back 34 years to 1972.

Back then, Nolan was aged 29 and living in Silicon Valley where he and business colleague Ted Dabney had formed Atari with just $250 dollars each.

Yet from those humble beginning grew a company which dominated the early days of videogaming – and much of that was to do with Nolan's determination to succeed.

Bushnell was born in 1943 in Clearfield, Utah. Brought up as a Mormon, he has been married twice: first to Paula Nielson and secondly to current wife Nancy Nini. He has three daughters, Alissa, Britta and Neela, and five sons: Brent, Tyler, Gavin, Dylan and Wyatt. Sadly, his father died when Nolan was 15, leaving him as the man of the house, looking out for his mother and three sisters.

His interest in electronics was sparked by a teacher called Mrs Cook who taught him electricity in the third grade. Nolan became interested in playing with science, hooking up bulbs and batteries and creating new electronic devices.

And as he went through life, he learned from many people around him: a ham radio operator who lived nearby taught him electronics and radio; a boss at the Lagoon Amusement Park in Salt Lake City, in which he worked part-time from the age of 19, gave him lessons in business, and a university lecturer at the University of Utah gave him a grounding in computer graphics.

But then his interest was grabbed by a basic space combat game called *Spacewar* and it would prove to be the catalyst for what would later become a multi-billion pound videogame industry.

Nolan had already spent a few years during the late 1960s sneaking into the computer labs at the University of Utah to play *Spacewar*, which had been created by Steve Russell on $7 million mainframe PDP-1 computers at the Massachussets Institute for Technology in 1962.

The influence is not lost of Bushell, who juggled going to university with working at the amusement park.

"The real credit for kickstarting the videogaming industry has to lie with Steve Russell," he explains. "He was my inspiration. I thought *Spacewar* was fascinating – it was fresh and nobody had created anything like it before. From the moment I played it, I wanted to write my own programmes – the potential for videogaming was there."

Yet after leaving university in 1968, he was faced with two choices, neither of which involved videogames. He could take up a well-paid job as the amusement park manager or become an engineer with a company called Ampex, the company which invented videotape. He decided to chose the latter.

But that vision of *Spacewar* remained strong and in 1971 Nolan created his

[Arcade] *Star Wars* did it for movie sci-fi and *Space War* did it for videogames. Start a whole new and exciting era, that is.

IN BRIEF...

Nolan Bushnell's jaw drops when he plays Steve Russell's *Spacewar*, a space combat game from the 1960s. So he writes his own version, Computer Space, releasing it as a coin-op - but it fails. He turns his attention to simpler games and puts an idea for a bat and ball title to engineer Al Acorn - and the classic *Pong* was born. It's released by Bushnell and Tom Daubney's new firm, Atari, and is widely credited as laying the foundations for today's videogame industry.

Left: For such a basic game, it was fitting that the casing would be basic too, the word *Pong* being the only eye-catching feature. **Above:** Beautiful, slim and stunning – and that's just the coin-op machine. Computer Space was Bushnell's first attempt at an arcade game.

Not just a game, *Pong* was a video sk1 game as this flyer claims, reinforcing the yellow feel of the cabinet. Ace

own version called *Computer Space* on a cheaper, less advanced machine. "*Computer Space* was more complex than *Spacewar*," continues Bushnell. "As an engineer and technologist I wanted to create something impressive. It was as much about the techniques of the game as the game itself but it had to be fun to play. You see, from a technology perspective, everything was very hard to do in the early years and, from *Computer Space* onwards, I had to develop games that could be done with the limits of the technology at the time."

Whereas *Spacewar* had been created to show off the power and capabilities of the PDP 1, Nolan wanted *Computer Space* to be a commercial product.

Daubney was interested and the pair joined place where people enjoyed working. We were all interested in creating games and we liked to play what we were creating and that, I think, marked us out and made us successful. And remember, I didn't invent videogames. They had already been created – that's how I became interested in them. I just made them commercial."

Nolan created a casual work environment which threw out the rule book – there were no car parking spaces for directors and jeans were allowed in the office.

And then he employed engineer Al Acorn who had worked with Bushnell at Ampex. His first task was to create a simple ping-pong game based on a version that had been released for the Magnavox Odyssey console.

Al went to work, having been told by

"I DIDN'T INVENT VIDEOGAMES. THEY HAD ALREADY BEEN CREATED - THAT'S HOW I BECAME INTERESTED IN THEM. I JUST MADE THEM COMMERCIAL"

NOLAN BUSHNELL

up, selling the concept to coin-op machine manufacturer Nutting Associates in 1971. A total of 1,500 *Computer Space* cabinets were made in a failed venture that netted Bushnell and Daubney just $500.

Yet the pair were undeterred and sunk the cash into a new venture. Nolan wanted to call the new firm Syzygy but the name was already taken - instead they decided to call their company the Japanese-sounding Atari.

"I wanted to created a technologically advanced company, one which would push boundaries," Bushnell said. "There's no question that we did this. We had a great crew and very, very smart people working for us and we were innovating all the time.

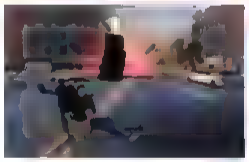
One of my philosophies was to create a Bushnell that it would be released by General Electric and that other business deals were in place to ensure it would be manufactured.

These claims were false. Nolan actually wanted to see how Al would perform as he had very little knowledge of videogames.

Bushnell says: "When I devised what became *Pong* and put it to Al Alcorn, it was meant to be a training project. It was only supposed to be a throwaway game because we actually wanted to create a driving game at the time. I chose tennis because of it's simplicity, yet when people say I created *Pong*, they're missing something – Al brought a lot to the project and he made it what it was. He deserves a lot of credit for the game."

Despite its simplicity, *Pong* was addictive

THIS IS A GAME?



Gaming has changed beyond recognition over the past 30 years. It's therefore difficult to make a direct comparison between Atari's *Pong* and Sega's *Virtua Tennis*, other than the basic gameplay of hitting a ball back and forth. But Nolan believes gaming has altered not just in the graphical presentation of titles but in the way they target audiences, particularly as he believes 40 per cent of the people who played *Pong* were women.

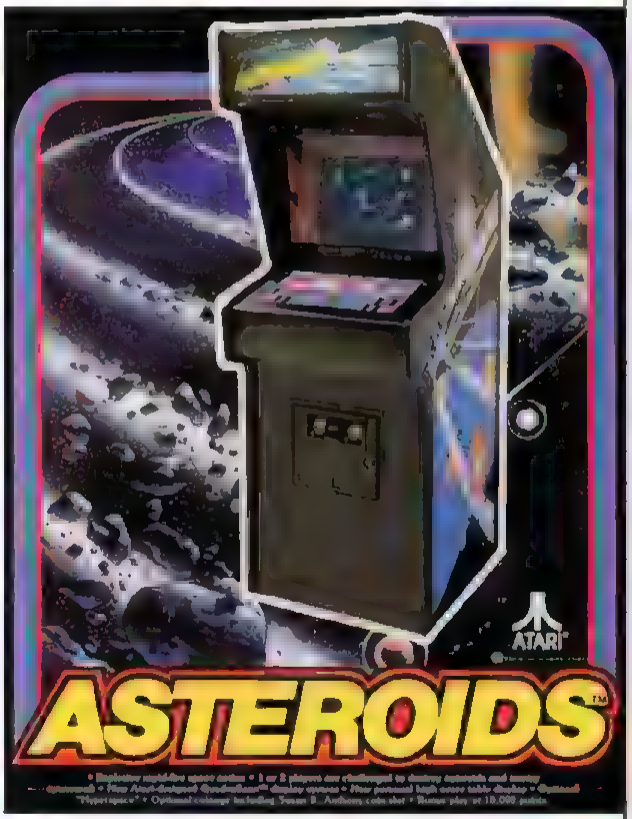
"That's changed now," he adds. "Unfortunately, the social and female gamer have been left out by focusing too much on violence or sports. Games are also too complex which leaves out the casual gamer. I believe there is a huge market opportunity in targeting the casual, social or female gamer."

Yet Bushnell reckons Sony and Microsoft have been good for gaming from a technology perspective. "Technology is moving toward photo realism and the steps taken have been very impressive. The network effort for Xbox Live is very important for the future of games."

But he objects strongly to games such as *Grand Theft Auto* which recently caused a stir for its sex scenes. "Controversy is a very powerful marketing tool," he says. "A year or so ago, WIRED asked me to present Videogame Of The Year to the makers of *GTA*.

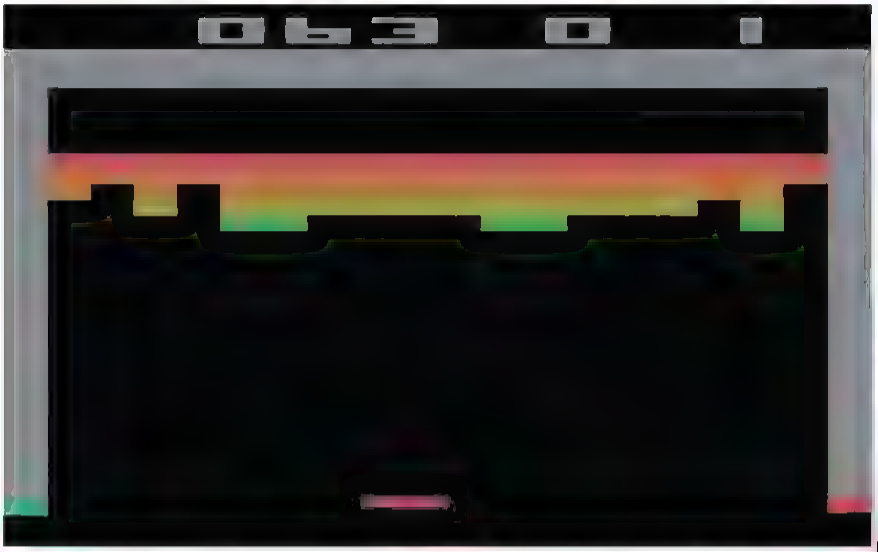
I declined because I don't believe that the degrading nature of the game deserves award."

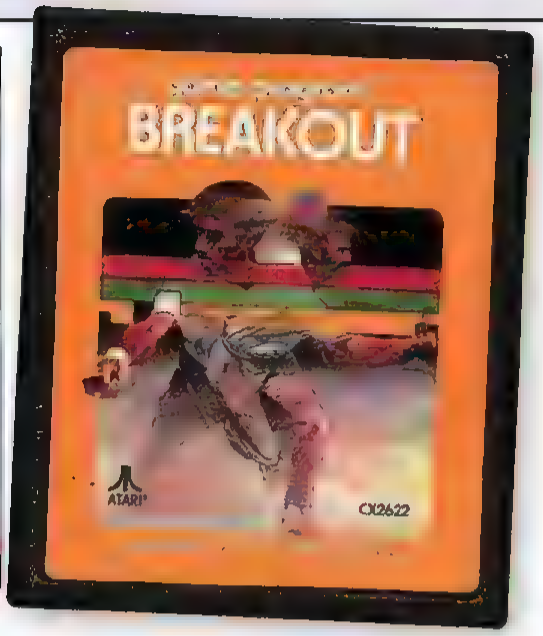
[Arcade] Spawning many a rip-off, Nolan envisaged *Asteroids* as a simple *Breakout*-style game where the aim was to clear the screen of rubble.



Looking space-age and sophisticated, this is how Atari advertised its latest smash-hit game.

NOLAN BUSHNELL





Above: [Atari 2600, Simple yet colourful, *Breakout* captured the imagination of many children with its easy-to-learn but challenging gameplay. **Above right:** Considering *Breakout* contained no humans, just a simple bat, this cover proves the fact you can never judge a book by its cover also rings true for some games

And although it was a fresh concept, it was based on familiarity. Nolan realised that people would recognise instantly what they had to do. It was a departure from the complexity of *Computer Space* and it would shape Bushnell's approach to videogaming for a long time to come.

"I began to quickly realise that because of the limited technology, games had to be fun, good and solid. We were the first to develop videogames so we had to make them simple, easy and quickly understood," he continues.

"Yet this wasn't all that easy to do. I think a simple game was harder to create than a complex one because it was impossible to hide a bad game. There was no capacity for putting in nice graphics to mask bad gameplay. In a way, I consider early videogames to be like Chess was 4,000 years ago. Both contain fundamental traits which have stood the test of time. They have created frameworks which are still adhered to today."

Nolan tried to get *Pong* manufactured but he was repeatedly turned down. So he persuaded Andy Capp's, a local bar in Sunnyvale, California, to install a cabinet containing the game for just one week to see how well it did.

After seven days, it had become jammed with quarters from eager punters. Nolan then mustered up the cash to create more machines and by 1973, 8,000 of them had been rolled out and Bushnell and Dabney were staring at a profit of $3.2 million.

"I'm very proud of *Pong*," admits Bushnell. "At the time I thought it was going to be good but certainly not the commercial success it was."

Two years later, Nolan developed the game for the home market and his $99

Slow to take off but when it did it dominated for years to come, the Atari VCS was the first mainstream console

"THE VIDEO GAME INDUSTRY HAS CURRENTLY BEEN DOING THE SAME THING OVER AND OVER AGAIN, WITH LITTLE INNOVATION OR OUT-OF-THE-BOX THINKING"

NOLAN BUSHNELL

BUSHNELL SAYS

DESPITE being intrinsically linked with *Pong*, Bushnell's favourite Atari game is *Touch Me*, an arcade game released in 1974 that was later created as a handheld device.

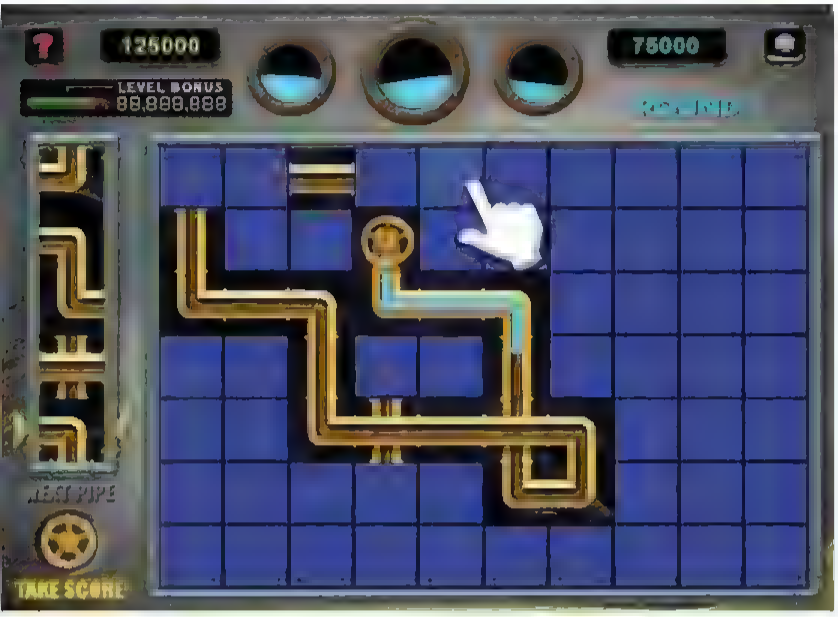
"It was one of the first electronic pattern-matching type games," Bushnell explains, describing the way players had to follow a pattern of lights and sounds and replicate them to get a high score. Most people remember it as Simon, a version created by MB Games.

"It continues to be knocked off and it keeps everyone from a two-year-old to a 60-year-old entertained through its simple call and response memory play.

Studies have shown that games are one of the best ways for people to learn and this shows how simple concepts can be successful and educational."

Following the *Touch Me* handheld, it was envisaged that *Breakout* and *Space Invaders* would also be created as portable devices but they unfortunately failed to make it to market.

Above and right: Nolan's favourite game was not *Pong*, surprisingly, but this early version of Simon. Created as a handheld machine, the first Atari ever made, *Touch Me* hit a whole new market



[PC] This version of *Pipemania* is one of a large range of card and puzzle games ported for use in the uWink

Pong console was eventually taken on by the department store, Sears. People were prepared to queue for hours to get their hands on *Pong*, which went on to sell 150,000 machines, but this grabbed the attention of other companies which had begun to create their own consoles.

In 1976, Nolan – who by now had 100 per cent control of Atari as Daubney had decided to offload his half of the company to him – sold Atari to Warner Communications for $28 million, half of which went to Bushnell who became the chief executive officer.

The company then created the Video Computer System (VCS), released in 1977. A year later Bushnell left the company, sparking a reorganisation within Atari. Yet the company went on to release *Space Invaders* on the VCS – a game that was proving a hit in the arcades – and the console's fortunes seemed unstoppable.

Today, having recently celebrated his 63rd birthday, he is still involved in videogaming.

In the years since Atari, he has been involved in umpteen different companies each with varying success, among them Chuck E Cheese's Pizza Time Theaters where children could eat and play games, Androbot Inc, which created personal, entertainment robots, and Sente Games.

But now he is pushing ahead with uWink, a hi-tech restaurant franchise based around videogames. Each outlet is packed with monitors from a two-sided touchscreen on every table to flat panels in front of every bar seat. Although the screens will show music videos and film trailers, their main use will be for games, such as card and puzzle titles, among them a variation of *Pipemania*.

Bushnell says: "The videogame industry has been doing the same thing over and over again, with little innovation or out-of-the-box thinking. But before the videogame, games were for social interaction, not just one-to-one entertainment and uWink plans to bring people together."

As of 2010, Bushnell has once again joined Atari (formerly Infogrames) with a position on the company's board. Needless to say we'll be watching his involvement very, very closely.

These machines can be found dotted around Bushnell's uWink restaurants, re-introducing families to games

FEATURED GAMES

COMPUTER SPACE

Regarded as the first coin-op ever released, *Computer Space* was nonetheless a flop. Even though the majority were impressed by this new futuristic-looking machine, it's difficult control methods were off-putting to many. Nolan says: "This was my tribute to Steve Russell's *Spacewar* and it had modest success. I wanted to build on that game, make it more complex. Perhaps it was too complex."

PONG

Pong was a game of skill that required quick reflexes and an alert mind – not bad for a game which, like *Tetris* years later, is built on such a simple premise.

Nolan says: "I wanted the simplest game I could think of and so decided that something with a bat and ball would be perfect. Programming the game so that the ball would shoot off at angles helped it to be fun and the scoring element gave it the competitive edge. Al did a great job on the sound."

BREAKOUT

Breakout was Nolan Bushnell's third game. He designed the concept – basically a single-player Pong – and then asked a programmer called Steve Jobs to code it. Jobs set about programming the game with the help of Steve Wozniak. And Bushnell paid them $7,000 for the work (although just $350 was handed to Wozniak).

Nolan says: "This was an interesting game because I had such a hard time with it. At the time, the programmers at Atari wanted to create driving and flying games since they were engineers and wanted to create something they would be impressed by so nobody would volunteer for it. But I wanted this simple game to be created and I was pleased with the result."

Jobs and Wozniak later formed Apple Computers.

ASTEROIDS

Nolan envisioned *Asteroids* as a variation of *Breakout*. And in 1980, *Asteroids* – together with Atari's *Lunar Lander* – became the first videogame to ever be registered in the Copyright Office in America.

Here you played a spaceship which had to blast large asteroids into smaller ones until the entire screen was cleared and it spawned many a copycat. Like *Breakout* and *Pong*, this has since been ported to virtually every known format, including the Atari VCS.

Nolan says: "*Asteroids* was simple and yet thrilling. If you look at *Asteroids* and *Breakout*, they are both about cleaning up the environment, whether it's breaking up rocks or destroying bricks. These were good, solid games."

ATARI VCS

Also known as the Atari 2600, this was the classic home console which no home in the late 70s and early 80s could be without. With its woodgrain finish, this was a machine for the living room, not a toy for the children's bedroom. Atari had already dabbled in consoles, producing machines capable of playing just one game. But now the firm – and Nolan – wanted to push things further and create a machine which would play many games.

"We wanted something better than the single-game machines and so created a console which could be programmed to run many different games," says Bushnell. "Micro-processors had come down in price and made the project viable. We wanted the MOS Technology 6507 CPU which had only been created about three months earlier so it was cutting edge stuff.

I still think this is a good console now and I'm so proud that it's still talked about today."

THE CLASSIC GAME

QUAKE II

In late 1997, after id Software had been hard at work setting, raising and re-raising the first-person shooter throughout the Nineties, *Quake II* was unleashed upon the world. Its multiplayer support for up to 32 players took the FPS world by storm and led to the hit title absolutely dominating the 1998 online gaming scene. *Quake II* went on to sell over a million copies and was instrumental in making 3D graphics cards a veritable home computing necessity rather than merely an optional extra reserved for the most hardcore of PC gamers. Craig Ritchie fires up his 56k modem and revisits one of the most influential sequels in videogaming history.

Flak Jacket

A *Quake* regular, these handy pieces of military apparel provided a bit of extra support as they softened the (many, many) blows from the inevitable Strogg bombardment that befell your unfortunate marine. A necessary piece of equipment that no self-respecting soldier would leave home without.

First Aid

It's quite handy that so many videogame baddies leave countless medical supplies strewn all over their places of business. *Quake II* is no different, and with the amount of abuse the Strogg hurl your way, you'll be collecting these and healing your ailments with an efficiency that the NHS could only dream of.

Shotgun Shells

Just one of myriad boxes of ammo that litter the halls of the Strogg base. We chose this one because *Quake II*'s shotgun blasts are ever so satisfying, and become even more so once you find that lovely double-barrelled beast. Powerful, violent and loud – the stuff FPS dreams are made of.

Quad Damage

Ah, Quad Damage, our old friend. A handy pick-up that pretty much does what it says on the Q-shaped box. While this may have given you an unfair (but highly enjoyable!) advantage over the regular, single-player campaign enemies, Quad Damage was a multiplayer deathmatcher's Holy Grail.

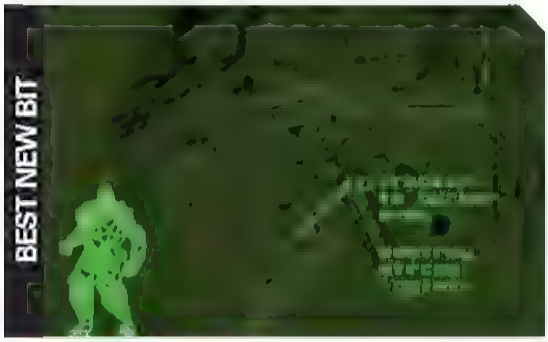
MEMORABLE MOMENTS

It (really) defined a genre

As the creator itself said of its 1997 masterpiece, "By now, it had become clear that id's games were reason enough to upgrade, or even buy personal home computers." *Quake II*'s influence extended way, way beyond just some first-person blasting fun. The versatile id Tech 2 engine that powered the game brought about an unprecedented modding scene and amazing multiplayer deathmatch madness, not to mention the most mind-blowing graphics the world had ever seen produced by the ugly grey box. And oh, let's not forget, that it was responsible for influencing the future of an entire industry. The word 'classic' sounds about right to us.

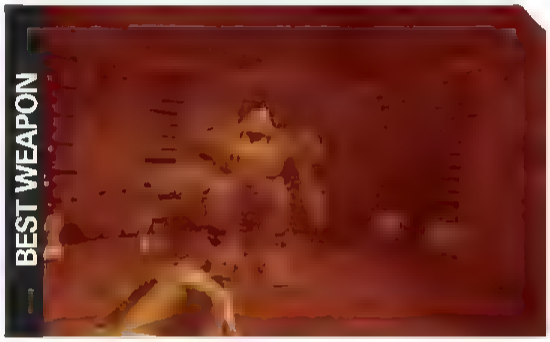
Not your common or garden Tank

When someone is out to kill us by whatever means necessary, it is not strange for us at **Retro Gamer** to admit we like the guy. We do. Like blasting him to pieces, that is. Take Tank, our favourite *Quake II* enemy. When you first encounter this behemoth, he's standing in the way of a workstation terminal the player needs to access. Unhappy that you've disturbed his computer time (how he handles the keyboard with guns for hands, we'll never know), Tank unleashes a barrage of bullets from his arsenal. Dropping this big guy requires more firepower than any of the enemies you've faced so far, so it's all the more satisfying to see him fall.



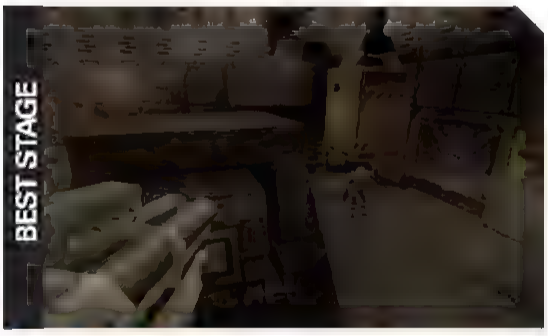
Why are we here?

Quake II had a memorable intro sequence as well as a solid back story, and went so far as to present players with briefings and objectives for each stage. This may sound simple now, but it was a big deal back in the day. See, most FPSs had hitherto dumped us in some sort of dangerous locale with the simple and solitary goal of reaching the end of the level (often marked 'Exit') while killing anything that stood in our way. Now we also had to do such things as reconfigure satellite communication links or locate and activate power cells, all before reaching the end of the level (often marked 'Exit') while killing anything that stood in our way.



Big and round

While there were more powerful weapons on offer (the rocket launcher and BFG come to mind), we've always had a special thing for the chain gun. Some of our most enjoyable moments were those where we found ourselves loaded up with ammo and stepping into a room full of enemies. What good times we had, readying this rotating beast and then holding down the left mouse button as we truly delivered a HAIL OF BULLETS in capital letters. Very handy for us, then, that the lazy Strogg left a couple of these just lying around instead of locking them safely away where no invading marines could get their hands on them..



Supply Station

After some gratifying levels of mindless gunfighting, the player reaches the Supply Station with the objective of destroying the Strogg logistical train and finding the missing power cells for the warehouse. The Supply Station is full of elevators, conveyor belts, and other heavy equipment. Many of these could be switched on or off, allowing for inventive killings including crushing enemies under lifts and dropping a large, explosive crate onto the unsuspecting Gunner below (see screenshot). Navigating through this stage meant powering up the right conveyor belts and activating switches from afar with carefully aimed shots.

If I'm going, you're coming with me

Adding novelties to an (almost) decade-old genre is the only way to keep your sequels from being just more of the same. id Software was the first to realise that not every opponent should just keel over dead when the player had unleashed the necessary amount of bullets into it. So, hit an enemy just enough and in his death throes he would take some final shots at you – sometimes this was a random twitch reaction to having his head blown off, while others were aimed right at you. So although you can take the Strogg down with a few careful hits, you're only really safe once that extra shotgun blast has seen them explode into meaty chunks.

What the mags said... ages ago

Gamespot

"We must conclude that *Quake II* is nothing less than a remarkable game, and we recommend it without hesitation. But still... although it's never been done better, it has all been done before, and that casts a shadow on the experience that no amount of technology can hope to penetrate."

What we think

While we don't think everything in *Quake II* had been done before, we admit its contribution to gaming came more from its technological achievements rather than any leap in gameplay. But for what it added to the gaming world and the path it paved for the future of 3D hardware, *Quake II* is undeniably a landmark title.

IN THE KNOW

PLATFORM: PC
DEVELOPER: IDSOFTWARE
PUBLISHER: ACTIVISION
RELEASED: 1999
GENRE: FIRST-PERSON SHOOTER
EXPECT TO PAY: £5+

MATTEL ELECTRONICS
INTELLIVISION

INTELLIVISION

WITH ITS CUTTING-EDGE GRAPHICS AND SOUND, THE INTELLIVISION WAS THE WORLD'S FIRST 16-BIT GAMING CONSOLE AND WORTHY SUCCESSOR TO THE ATARI 2600. ARMED WITH THE GREATEST CONTROLLER EVER, IT TOOK THE WORLD BY STORM, AS THE THIRD REICH COULD HAVE ONLY DREAMED OF DOING. RETRO GAMER EXPLAINS ITS TURBULENT AND CONVOLUTED HISTORY, THE UPS AND DOWNS, ITS BATTLES WON AND LOST IN A COLOURFUL RETROSPECTIVE DEDICATED TO THE MEMORY OF THE MIGHTY INTELLIVISION

The Intellivision: it epitomised cool elegance and sophistication during the maelstrom days of the videogame revolution in the early Eighties when the gold-disked beauty slogged it out with the mass-marketed Atari 2600.

In a David and Goliath scenario, the Intellivision came armed with more than a slingshot. It was the world's first 16-bit gaming console with a voice synthesizer box and kit allowing it to mutate into a home computer and music studio. It also had a wondrous controller, the best the world has ever seen. Unlike the 2600 with a woefully unresponsive pillbox and daft button as a joystick, the Intellivision came with two keypads that moulded the hand and fingers better than James Wood's bionic-cancer gun in *Videodrome* (1983). Not only did the controller have a number pad and plastic interchangeable overlay, the gaming disc featured 16 positions compared to the 2600's eight. As controllers go, it was sheer gaming nirvana that allowed precise and graceful play.

The majority of the games were light years ahead of the competition. *Utopia* was one of the first 'god' games, *B-17 Bomber* with the Intellivoice offered heart-pounding missions to the heart of the Third Reich dodging flak and enemy fighters; *Mountain Madness: Super Pro Skiing* was blistering racing where opponents did a 'Sonny Bono' by slamming into a tree; *Auto Racing* also had a cameo in TV series *Knight Rider* and *Advanced Dungeons & Dragons Cloudy Mountain* would see foolhardy adventurers losing their bowels and being ripped to bits. And there were dodgy third-party games such as *The Texas Chainsaw Massacre* and the saucy XXX romp *Custer's Revenge*, for the more adult orientated gamer. However, such luxury and refinement came at a price when the Intellivision was released in 1980, a hefty $300 ($800 in today's money). But it was worth every cent to have a console with the cutting-edge style and polished power of, say, Alain Delon, compared to the Atari's Vinnie Jones.

The Intellivision's roots stretch back to 1977 when Mattel introduced one of the world's first handheld videogames, and the same year Atari released the VCS, better known as the 2600. In 1978, Mattel began work on the Intellivision in California, and a year later, the console was test marketed with four games. The response to the Atari's new challenger was promising and the Intellivision sold throughout the US with 19 titles reaching sales of 175,000 units. Another competitor to the Intellivision and 2600 was the 8-bit Philips Videopac G7000 that featured an alphabetical keyboard. Despite selling fairly well, shifting over a million units in the US alone throughout the early Eighties, the console was doomed due to a severe lack of third-party support. One of the G7000's better titles was *Satellite Attack*, seen to good effect in the violent cop flick *Order Of Death* (1983), where Harvey Keitel slums it with video junkie and psycho John Lydon aka Johnny Rotten.

To satisfy demand as well as the R&D of new titles, Mattel hired top programmers who sheltered behind the veil of the Blue Sky Rangers in a bid to stop Atari poaching the cream of its talent. With the Intellivision fortified with the best

» Is it a computer? Is it a console? No, it's the Mattel Keyboard Component

SPECS (MASTER COMPONENT):

CPU: General Instruments CP1610, 16-bit processor @ 894 KHz

Memory: 7k internal ROM, RAM and I/O structures, remaining 64k address space available for external programs/256-by-8 but static RAM chip (147 bytes optimised for gameplay); 1,325 bytes of RAM; 7,168 bytes of ROM

Controls: Two hand controllers, 12 button numeric keypad, four action keys, 16 direction movement disc

Sound: Sound generator capable of producing three-part harmony

Colour: 64 program-defined 8 by 8 images; 160 pixels wide by 196 pixels high

Video Resolution: 192 vertical by 160 horizontal picture elements

INTELLIVISION

» Why don't we ever get advertising like this any more? The mind boggles.

» Early box art was very distinctive and immediately let you know that you were looking at an Intellivision game.

» An early catalogue cover, which demonstrates just how exciting owning an Intellivision could be.

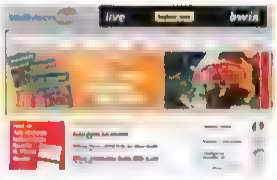
COMMUNITY INTELLIVISION SITES TO WATCH

Intellivision Lives!
www.Intellivisiongames.com
Run by Keith Robinson, who was one of the Blue Sky Rangers and responsible for *Tron: Solar Sailer* and *Shark! Shark!* So he knows his onions. Not only that the site is lovingly maintained and features lots of facts on the Intellivision. Go look see now.

Intellivision World
www.intellivisionworld.com
English and Italian site that has brochures, instructions and emulators. The hardware section is a joy for Intellivision techies as is the exhaustive rarity and price guide. Apparently one of the more obscure games, *Congo Bongo*, can reach an incredible $839.

Intellivision System
www.intellivisionsystem.com
It's a bit rough round the edges, but this is a fan site from the heart. There are some gems to be found with trivia on games and hardware. Also, there are live links to Intellivision rarities on eBay, which always sounds like a good idea when you return from the pub.

Intellivision Gumbo
www.home.earthlink.net/~classic-videogames/intellivision
One that's hardly going to win prizes for design the Intellivision Gumbo site has rare and wonderful posters and promotional material from the past. The page on the Intellivision Demonstration Unit – Model 3806 is of interest.



programmers, artists and the cash cow that was Mattel Electronics the videogame war with the Atari 2600 was going to get real ugly.

In 1981, Mattel invested $6 million in a national ad campaign in direct competition to Atari that compared the graphic power of the Intellivision to the 2600. For the first time in gaming history, the media was whipped into a frenzy, predicting a bitter war between the two giants and despite being twice as expensive as the 2600, the Intellivision sold over 850,000 units. In what was to be the Intellivision's finest hour in an industry now valued at $1.5 billion, Mattel announced a staggering $100,000,000 profit in 1982. A number of the most popular gaming cartridges sold over a million units and Activision, Imagic and Atari developed their own software for the system, all eager to get a piece of the action.

With 50 titles to go with the system, the Intellivoice was released with three games: *B-17 Bomber*, *Space Spartans* and *Bomb Squad*. A revolution in videogaming, the Intellivoice orchestrated limited but effective speech sampling that could enhance atmospherics. However, despite positive reviews, the Intellivoice bombed with only 300,000 units sold, the remainder gathering dust in warehouses. The fourth title, *Tron: Solar Sailer*, only shifted 90,000 copies and other voice-enhanced games in development such as *Space Shuttle*, *Magic Carousel*, *Convoy* and *Quest* – a promising *Dungeons & Dragons* title – rotted in limbo when the Intellivoice was quietly buried in August 1983. With a $20 million ad campaign starring actor Henry Thomas fresh from Steven Spielberg's *E.T.* (1982), Mattel promoted its latest gadget: the computer keyboard.

Released in limited numbers at a whopping $600, it was powered by 64-bit technology and a secondary CPU, when most home computers of the period could only muster 4K to 16K of number crunching power. With a built-in cassette drive and optional connection for a printer, the Intellivision was more than a gaming console but a fully functional home computer. An ambitious but expensive enterprise, the keyboard failed to enthuse the imagination of the public (the keyboard, console and games fetched over $4,000 in a recent eBay auction) and Mattel concentrated on gaming software, hiring over 100 staff. At the end of the year, the console was released in Japan by Bandai and worldwide Christmas sales were strong, despite competition from the new ColecoVision. Sadly, the Intellivision's popularity with the masses was to wane as a gaming depression loomed – the market was saturated with product and there were not enough sales going round for all the companies to survive. The Intellivision's salad days were over.

In 1983, the gold and wood grain Intellivision was superseded by a sleek $150 light grey model in a bid to attract sales – the Intellivision II. Also, the ECS (Entertainment Computer System) hit the shelves. An inexpensive alternative to the computer keyboard, it was limited to a 2k expansion, but the ECS could also be used as a music device with the 49-key synthesizer: gamers could now become budding New Romantics. Yet the ECS was doomed when the Mattel fat cats decided to throw their bucks at gaming software and canned what was a novel piece of equipment. Towards the year's end, 100 Intellivision games were produced and the System Changer module, a cheeky 2600 clone that used the Intellivision for its power, allowed Atari games to be played.

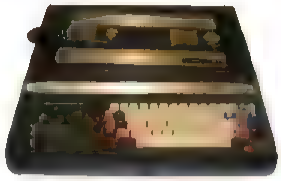
☐ **Programmer Ray Kaestner**, who originally worked on *Quest*, wrote the code for what is considered a perfect port of the arcade version of *Burger Time* in five months.

A gaming device way ahead of its time was the PlayCable, an adapter that plugged in the cartridge slot of the Intellivision. For $5 a month, it allowed up to 20 games to be downloaded via cable and stored on the machine's RAM. Each month, the games would be rotated and overlays and gaming instructions would be sent to subscribers. However, the PlayCable could not store larger games due to its limited memory and, although popular in the areas that provided the service, it was discontinued in 1983. The year also saw the introduction of the Atari 5200 and the Vectrex, and as games flooded the market, the Intellivision's days as the numero uno were numbered. As a consequence of mass product availability and competition coupled with limited market interest, the industry panicked and collapsed. Smaller companies threw in the towel and the big boys tightened their purse strings. The Intellivision II was sold off for $69 and Mattel sacked two-thirds of its programming staff with a record loss of $300 million. Suffice to say, plans for the Intellivision IV Master Component with 3D graphics and modem that let two players engage together over a phone line were canned.

In 1984, Mattel shut the doors on its gaming business and sold the Intellivision to INTV Corp who continued to flog the console although the videogame industry was at that time presumed dead in the water. As stock dried up, the company produced the INTV System III in 1985, which was in essence the original Intellivision sometimes sold as the Super Pro System. The NES was released in the mid-Eighties and its success enthused INTV to hire former Intellivision staff to complete unfinished Mattel games as well as republish older but popular titles. With sales of 10,000 to 20,000 units, turnover was low but profitable as INTV were a barebones operation. As the Atari 7800 and the 8-bit Master System sales proved encouraging, INTV announced the INTV System IV but it was never released. Based on the Intellivision III Master Component from 1983 (which was also unreleased), the System IV was rushed into development to compete with the ColecoVision with high-resolution games (320x192 pixels) and a built-in Intellivoice. In 1988, the writing was on the wall for the ageing Intellivision. Stores ceased trading with INTV and the company developed software for the NES, finally filing for bankruptcy in 1990, its remaining stock dumped in cheap stores such as Tandy/Radio Shack.

☐ **But the Intellivision** refused to die and it lives on. The original Blue Sky Rangers, pioneered by Keith Robinson, formed Intellivision Lives! in 1995 and the ex-Mattel Electronics boffins and programmers obtained exclusive rights to the console and its entire catalogue of games. Due to public demand for retro gaming in an age where modern games are coated in high-gloss graphics but suffocate in a vacuum of zero gameplay, there is a growing trend for Intellivision software from veteran players to noobs alike attracted to the system's simple yet accessible titles. Thanks to Intellivision Lives!, PC and Mac emulated versions of games are marketed, as are games for mobile phones published by THQ Wireless. Direct-to-TV units and greatest hits packages, T-shirts and mugs brandishing the Intellivision logo of choice are available as is *Intellivision In Hi-Fi*, a CD of the catchiest tunes from the games. So now there's no excuse not to whistle along to the insanely infectious score to *Snafu* while zipping down the motorway.

Indeed, in its three decades of gaming popularity, the Intellivision remains true to its core: intelligent television. With over 125 titles produced and about 3.5 million consoles sold, the Intellivision continues to draw a wealth of gamers attracted to the brand, the games and its components that pushed technological boundaries from a gaming machine to one of an advanced home computer. And where the competition has now been buried under the sands of time, the future of the Intellivision is bright and cheerful. And as the strap line for the Intellivision Lives! website states bold and proud – 'Blocky after all these years.' Yeah baby, you had better believe it!



SPECS (MASTER COMPONENT AND KEYBOARD COMPONENT COMBINED):

Memory: 16K RAM resident (10 bit) words memory can be expanded to more than 1000 8k pages (8 megabytes).

Keyboard: 60 key typewriter keyboard.

Tape Cassette Drive: Built-in completely computer controlled. Records/plays two digital and two audio tracks in one direction. 30 minutes of program material and data storage.

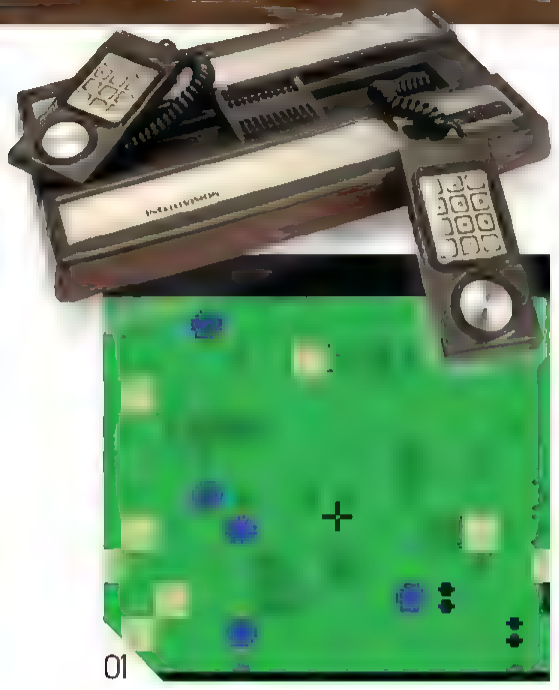
Video Resolution: Standard. 192 vertical picture by 160 horizontal elements. High resolution alphanumerics. 24 lines of 40 characters.

Expandability: Two parallel peripheral I/O expansion ports, which allow addition of external memory, peripherals, plus access to CPU bus.

Potential Peripherals: Telephone modem, voice synthesizer and printer.

Credits: Thanks to Keith Robinson and Henry 'ET' Thomas – the ameta Retro Gamer drinking partner who couldn't be bothered to be associated with the Intellivision now that he's all grown up. Cheers, mate. © Jay Slater, 1 July 2008

INTELLIVISION



PERFECT TEN GAMES

Sleek, stylish and with those innovative looking controllers, Mattel's Intellivision proved more than a match for Atari's 2600. Supported by a host of great games, it was rather tricky choosing our ten favourites, but with any luck you'll hopefully agree with our final ten choices.

B-17 BOMBER

- **RELEASED:** 1982
- **PUBLISHED BY:** MATTEL ELECTRONICS
- **CREATED BY:** MATTEL
- **BY THE SAME DEVELOPER:** ASTROSMASH

01 **A rather neat** little game this one. *B-17 Bomber* has you playing the role of a steadfast pilot whose job it is to take out various Nazi targets across mainland Europe by (ironically) waving a black cross over them and pressing a button to release your bombs. Yes, the idea of *B-17 Bomber* might sound silly and a bit simplistic, but the game was pretty innovative for its day, and it doesn't look too shabby either. The most novel aspects of *B-17 Bomber* are the multiple camera angles that could be accessed brilliantly by turning the dial, and the scary inhuman warnings that crackled from the Intellivision's pant-destroying voice box peripheral that warned you of upcoming hazards and targets that you had to eradicate.

01

DINER

- **RELEASED:** 1987
- **PUBLISHED BY:** INTV CORPORATION
- **CREATED BY:** REALTIME
- **BY THE SAME DEVELOPER:** TOWER OF DOOM

02 **The Intellivision is** renowned for its appetite for tasty arcade conversions and while *Burger Time* can stand tall as one of its tastiest looking, feeling and... erm, sounding, *Diner* – it's Intelli-exclusive unofficial sequel – just edges its way onto this list. Smooth feeling and gorgeous looking, thanks to its brilliant faux 3D look, *Diner* had you help something that looks like the Pillsbury Doughboy make a sub sandwich by kicking things that are referred to as 'Food Balls' into a large roll at the base of the screen. To make sandwich prepping more hazardous, you also had to avoid the deathly touch of frankfurter guys, animated bananas and frothy cappuccinos (or are they ale tankards?), by peppering them with pepper spray.

02

DONKEY KONG JR

- **RELEASED:** 1983
- **PUBLISHED BY:** COLECO
- **CREATED BY:** NINTENDO
- **BY THE SAME DEVELOPER:** DONKEY KONG

03 **Given that the** Intellivision version of *Donkey Kong* was considered – after first viewing by Mattel – to be an attempt by Coleco to try to sabotage its machine, it wouldn't be unfair to say that there wasn't a lot riding on this game being anything other than another botched assassination attempt. However, surpassing the original in every way, *DK Jr* is a colourful and smooth Intellivision title that shows what the machine is capable of. So Jumpman looks like a Smurf, Kong like Swamp Thing and DK Junior that 'monkey' from Johnny Vegas's ads, but nonetheless there's still some faithful arcade gameplay to be found lurking in here.

LOCK 'N' CHASE

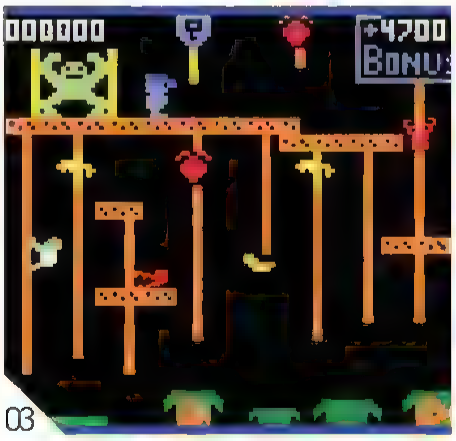
- **RELEASED:** 1982
- **PUBLISHED BY:** MATTEL ELECTRONICS
- **CREATED BY:** MATTEL
- **BY THE SAME DEVELOPER:** ARMOR BATTLE

04 **This port of** *Pac-Man* is brilliant, far better than the atrocious 2600 port. Now it's important to mention that *Lock 'N' Chase* isn't necessarily better than *Pac-Man*, but it provides a novel twist on the gameplay ethos and it was native to the machine, too. *Lock 'N' Chase* has you playing a colourful bank-robbing tomato who must avoid capture by a patrolling group of primary coloured police. It is a little more claustrophobic than *Pac-Man* and feels more frantic, but to make evasion easier you had the advantage of being able to close doors behind you to slow down the law enforcers.

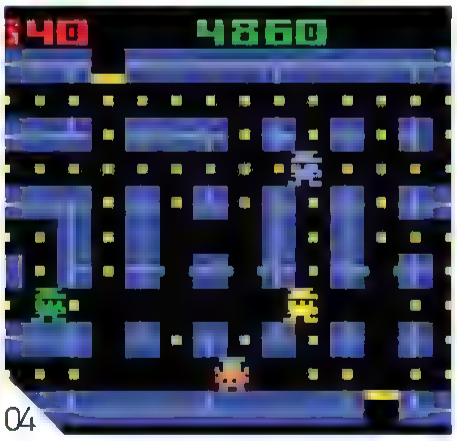
Q*BERT

- **RELEASED:** 1983
- **PUBLISHED BY:** PARKER BROS
- **CREATED BY:** GOTTLIEB
- **BY THE SAME DEVELOPER:** REACTOR

05 **For arcade faithfulness** this is probably as good as it got for the Intellivision, and there's no shame in that because *Q*bert* is a tour de force for the machine. While it's not without its faults and niggles (like forcing you to press the reset button every time a game ends; what's here looks, feels and plays a lot like the arcade machine. Excelling in the audio and visual department, fans of the arcade will come to appreciate how Parker came to wholesale nearly all of the elements and enemies from the arcade game for this home port while somehow not making the game look like a poorly decorated Christmas tree.

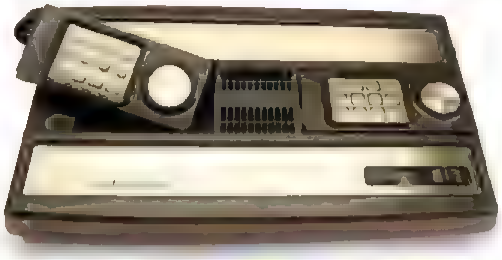


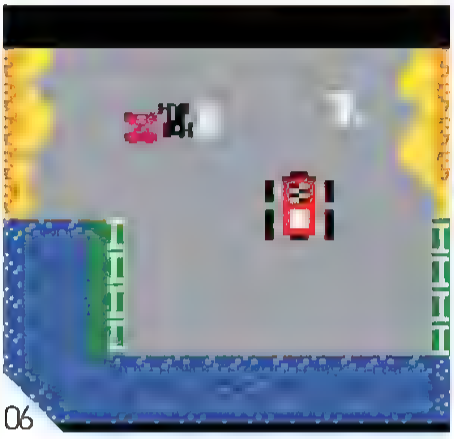
03



04

05





06

07

08

BUMP 'N' JUMP

- **RELEASED:** 1982
- **PUBLISHED BY:** MATTEL ELECTRONICS
- **CREATED BY:** DATA EAST
- **BY THE SAME DEVELOPER:** RING KING

06 Another quality arcade conversion that might look a little incredulous, but it somehow remains pretty faithful to the original. Gorgeous looking and great fun, *Bump 'N' Jump* is a colourful riot of racing. The game has you bumping and jumping onto opposing cars, clearing overpasses in the track and tacking in some incredibly sunny looking visuals (that change with the seasons) to rescue your kidnapped gal. The game's music and sound effects are also sublime and suit the look of the game brilliantly. So if you're a fan of Data East's early jostle racer then you'll find a lot to like in this impressive Intelli version.

DRACULA

- **RELEASED:** 1983
- **PUBLISHED BY:** IMAGIC
- **CREATED BY:** IMAGIC
- **BY THE SAME DEVELOPER:** SWORDS AND SERPENTS

07 Okay, here's another game that makes it onto our list because it's well loved by collectors and is exclusive to the machine. The first thing that strikes you about *Dracula* is how great it looks; the second is how much depth and interaction there is. The idea is simple: you play the titular Prince of Darkness and must avoid a biting by patrolling werewolves and gorge on the necks of townsfolk before sunrise. You could turn yourself into a bat, turn street denizens into zombies (and control them with the second pad) and play knock door run and watch the homeowners do all the running. Nothing complicated here, but what there is is presented brilliantly.

MICROSURGEON

- **RELEASED:** 1982
- **PUBLISHED BY:** IMAGIC
- **CREATED BY:** IMAGIC
- **BY THE SAME DEVELOPER:** ICE TREK

08 We admit this isn't one of the best games on the machine, but for its day it was certainly post modern. This hideous screenshot is how you'd look had you played the part of Jennifer Jason Leigh in *The Hitcher*. It's your internal organs spliced in half and painted in the style of epilepsy, and it provided the backdrop for *Microsurgeon*. You play a tiny probe swimming through gastric acid and organs to repe infections, disease and tumours. As you free roam the body, cleverly travelling through the blood stream makes you move quicker. Given its slow pacing, the game itself isn't amazing, but its uniqueness makes it popular among collectors.

09

DEMON ATTACK

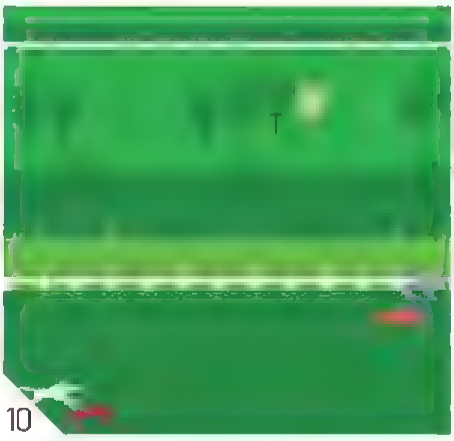
- **RELEASED:** 1982
- **PUBLISHED BY:** IMAGIC
- **CREATED BY:** IMAGIC
- **BY THE SAME DEVELOPER:** SAFECRACKER

09 This was a really difficult decision, it was a toss-up between this and *Defender*. Both are fantastic games, both tear shreds into the Atari ports (especially *Defender*). However, *Demon Attack* just pips it to the post. Why? Well just look at it. It's a beautiful looking version, it has detailed backdrop graphics of the moon's surface and the Earth in the distance (giving us a nice reminder of what it is we're actually fighting for). The most notable extra the Intellivision port had over the Atari version, however, was the inclusion of the arcade game's impressive mothership, a gargantuan demonic-looking base that manages to smother half of the screen, it proves an epic foe to topple and looked amazing.

HORSE RACING

- **RELEASED:** 1980
- **PUBLISHED BY:** MATTEL ELECTRONICS
- **CREATED BY:** MATTEL
- **BY THE SAME DEVELOPER:** KOOL AID MAN

10 A fantastically quirky game, *Horse Racing* does exactly what it promises to do: allow you to bet on horses. And unless you're a betting man (or woman) that might sound as appealing as running into traffic, but like a lot of these Intellivision games we're finding that when you actually scratch at their surface they're usually fantastically well put together, and *Horse Racing* is one such title. In its heart it's probably best appreciated as a multiplayer game, it's essentially one of those Kentucky Derby machines you occasionally see hanging out with the 2p machines in the arcades. You and six pals can have a flutter on the 'gee gees and even get to try to influence the result with the aid of some severe whip-lashing. Great fun.



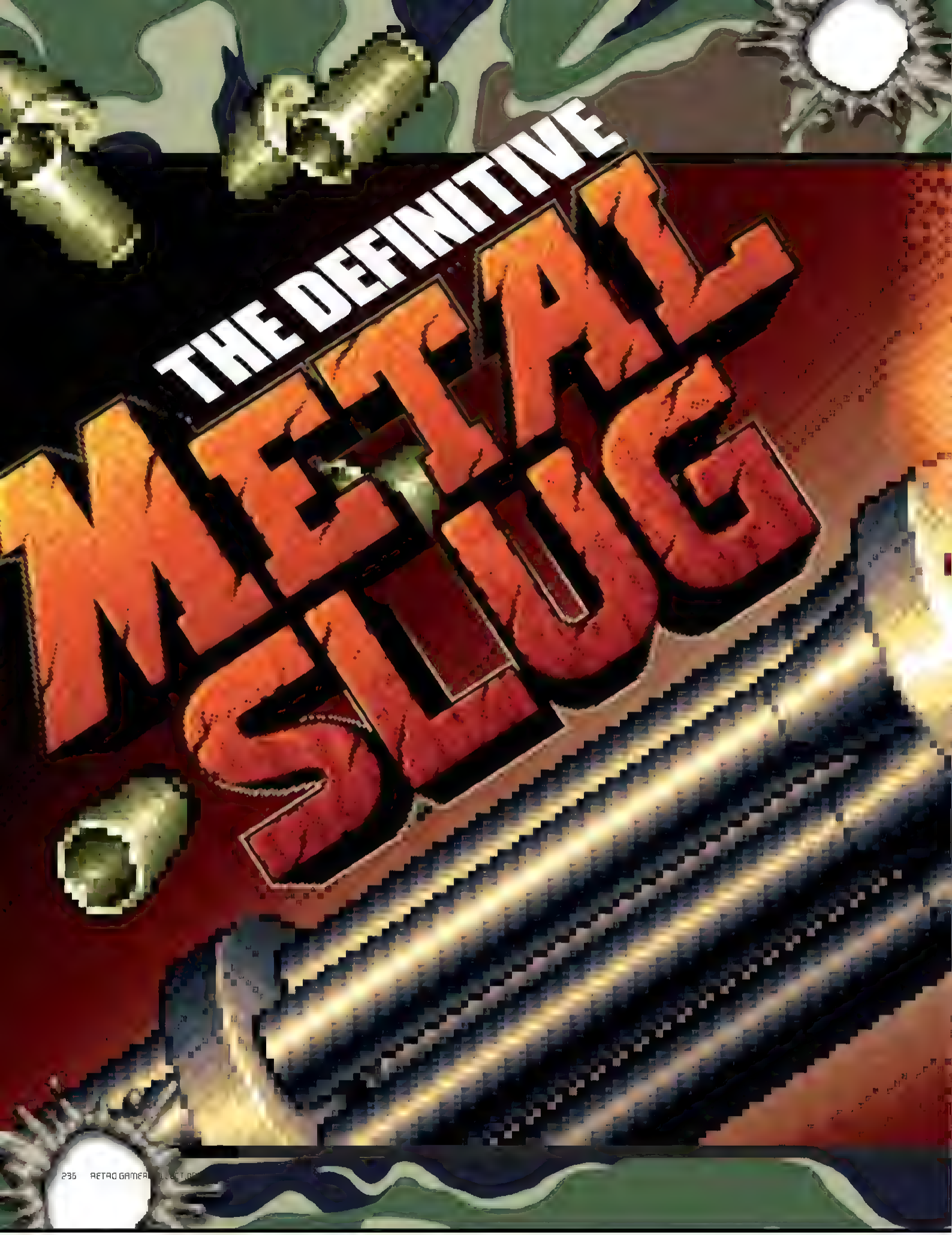
10

INTELLIVISION and the rest...

Many Intellivision owners will claim Mattel's machine was far superior to Atari's 2600. Why not look at the screens on the following spread and judge for yourselves?

01 DIG DUG
02 BURGER TIME
03 RIVER RAID
04 ZAXXON
05 PAC-MAN
06 COMMANDO
07 FROGGER
08 CENTIPEDE
09 DEFENDER
10 DONKEY KONG
11 CONGO BONGO
12 POLE POSITION
13 LOCK 'N' CHASE
14 HAPPY TRAILS
15 FA-HOM
16 MASTERS OF THE UNIVERSE THE POWER OF HE-MAN
17 MOUSE TRAP
18 FROG BOG
19 SNAFU
20 SPACE HAWK
21 CHECKERS
22 THE ELECTRIC COMPANY MATH FUN
23 SUB HUNT
24 AUTO RACING
25 SHARK! SHARK!
26 POPEYE
27 SPACE BATTLE
28 BUZZ BOMBERS
29 TRIPLE ACTION
30 REVERSI
31 VENTURE
32 LAS VEGAS POKER & BLACKJACK
33 BEAUTY AND THE BEAST
34 UTOPIA
35 BOMBSQUAD
36 DREADNAUGHT FACTOR
37 CARNIVAL
38 TUTANKHAM
39 MOTOCROSS
40 DRAGONFIRE
41 THUNDER CASTLE
42 PGA GOLF
43 ADVANCED DUNGEONS & DRAGONS TREASURE OF TARMIN
44 SEA BATTLE
45 MAJOR LEAGUE BASEBALL
46 SEWER SAM
47 BEAMRIDER
48 BUMP 'N' JUMP
49 PDA BOWLING
50 DRACULA
51 SUPER COBRA
52 THIN ICE
53 LADYBUG
54 VECTRON
55 WHITE WATER!
56 SPACE ARMADA

1800
04 05
06
07
2480 2480
11 12
13
PLAYER 1 BONUS
11013 500
14
18 19
20
21 ELECT MAN TO MOVE
3 8500 1UP
25 26
27
28
27700
READY?
24
32 33
34
35
1400
HOLE 4 DRIVER
39 40
41
42
12266
46 47
53 54
48
55
49
56
PLAYER 1
GAME OVER
GAME SCORE
1610


THE DEFINITIVE
METAL SLUG

Stuart Campbell returns from behind enemy lines to bring you the definitive lowdown on SNK's Metal Slug franchise

With a modern gaming environment that, thanks to XBLA, PSN and the DS, is more 2D-friendly than it's been in close to 20 years, it's easy to forget just how startling the sudden appearance of *Metal Slug* in 1996 was. I still remember the first time I encountered it, in a local arcade otherwise stuffed full of huge multiplayer Sega simulator cabinets running games like *Sega Rally* and *Daytona USA* and the long-forgotten *Desert Tank*. Shoved in a corner, near the change machine was something that looked like a relic from a bygone age that someone had forgotten to chuck in a skip. Your reporter and his videogame-journalist colleague did a double-take of proper disbelief at the unmarked, unassuming generic cabinet – was this *really* an old-school SNES-style 2D platform shooter? – and dropped a few coins in the slot.

An hour later we were still there, a few quid lighter in the pocket but still marvelling at the sheer character and fun of what we were playing, at a time when almost all arcade games had become incredibly po-faced and serious, increasingly concerned with 'realism' over the instant-fun hit that had been traditionally the preserve of the coin-op. (The only other 2D games that had survived the industry's excited fascination with the possibilities of polygonal 3D were fighting games – extremely serious in their own way, and jealously colonised by obsessives.) Compared to anything else that was in arcades in 1996, *Metal Slug* was like *Robotron* – an exhilarating non-stop bloodbath with beautiful pixel art and a sense of humour. (More accurately, it was the arcade equivalent of Treasure's 1993 Mega Drive masterpiece *Gunstar Heroes*.)

It turned out that we weren't the only people craving some trad-style gameplay values, and *Metal Slug* went on to be a huge and unexpected hit, gobbling money faster than SNK could hire trucks to carry it all off in. And we all know what that means in the videogames business – sequel after sequel after sequel. So join The Definitive one more time as we strap on an ammo belt, wade into the fray and see if we can't get to the bottom of who that pesky Liquid Ocelot really is once and for all! (That's *Metal Gear Solid* – Ed)

THE DEFINITIVE METAL SLUG

1996
METAL SLUG (ARCADE, NEO-GEO, NEO-GEO CD)

Uniquely for the time, *Metal Slug* was, of course, running on hardware that gamers could already access in their own home. But with cartridges for the home version of the Neo-Geo selling for £200 and upwards at a time, SNK desperately wanted to find a way of targeting the more mainstream home-gaming market and in 1994 it had come up with the Neo-Geo CD, a console that had essentially the same hardware as the MVS (arcade) and AES (home incarnations of the system, but loaded games via a CD drive rather than ROM carts. While CD games cost less than a quarter of the price of their cartridge big brothers, the drive was murderously slow – loading times of up to a minute between levels weren't uncommon – and SNK needed an extra carrot to tempt reluctant buyers. CD versions of games, then, sometimes found themselves with new original content or game modes, and *Metal Slug* was no exception.

Released a couple of months after the AES cart, *Metal Slug* CD is the same basic game, but also includes Combat School mode – a time attack on any level you've already beaten, where your ammo (not grenades) is unlimited. You get points for beating scores in Combat School, which move you up army ranks. Once you've completed the main game you also unlock Survival mode, where you have to get as far through the entire game as possible with only one life and no vehicles.

Also new to the CD port of *Metal Slug* is the ability to start from any level you've reached - not necessarily completed – with your credits reset to the maximum, making the game easy for anyone to finish (since by using both players, you can have up to ten credits of five lives each), and soon *Metal Slug* players were eager for more.

[Neo-Geo CD] The NGCD and PlayStation versions also reveal the names of each level. Mission 1, for example, rather charmingly, takes place in Absolute Trick Dream.

> **"Metal Slug was an exhilarating non-stop bloodbath with humour"**

[PlayStation] Loading happens early and often in PS *Metal Slug* – there are two disc-access pauses in the middle of Mission 1 alone.

1997
METAL SLUG (PLAYSTATION)

As it became clear that the Neo Geo CD wasn't going to be a hit, SNK turned its attention back to porting its games to other companies' hardware. The Saturn version of *Metal Slug* was a straight conversion of the CD game (complete with Combat School), and in Japan it could be bought with an optional plug-in RAM cart, which speeded up loading and improved the animation. But the PlayStation version which came out a few months later was a much more interesting proposition, despite being visually inferior and (like the Neo-Geo CD port) suffering badly from loading delays.

As well as Combat School it offered Another Story mode, a radical innovation which comprised four brand-new mini-games that played completely differently to the main game. (You can also unlock 'Another Story II', which is the same four mini-games presented from a different plot perspective, with a fascinating transsexual twist at the end. No, really.) Sadly, however, the PS *Metal Slug* was never released in the West, which meant that each mission's objectives were a complete mystery to anyone who couldn't read Japanese, and the mode was effectively unplayable. But it would nevertheless provide the template for home releases for years to come.

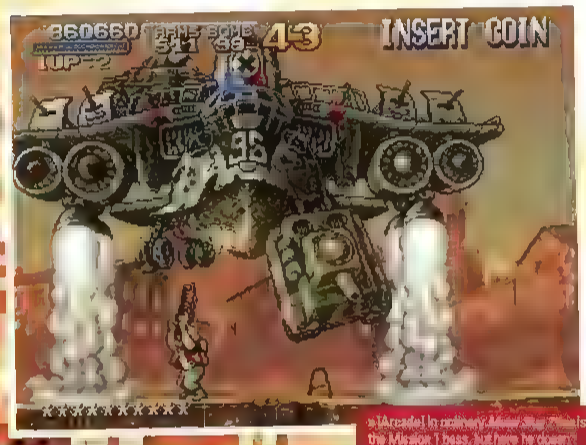
1998

METAL SLUG 2 (ARCADE, NEO-GEO, NGCD)

Despite being little more than a new set of levels for the first game (albeit six this time rather than five), and introducing two features that would go on to almost ruin the entire series, *Metal Slug 2* is still pretty good fun. To no purpose at all you can now select from four characters (girls Eri and Fio joining *Metal Slug 1*'s Marco and Tarma), all of whom play identically. Much more worryingly, *MS2* marked the debut of zombies and fat mode, two new inventions that took the fast-moving, all action gameplay of the original and slowed it to a horrible grinding crawl.

Fortunately, zombies are restricted to one short early section and fat mode isn't too hard to deal with. *MS2* is also almost totally free of later games' predilection for cheap, lazy sections where you're arbitrarily held up on a single screen shooting waves and waves of identical enemies for an age until you're eventually allowed to move on. Instead, you get well-conceived, atmospheric stages, tough but fair bosses, a couple of new weapons to play with and a game that stays fun all the way to the end. It's even got the best plot.

» [Arcade] [illegible] at the office for our [illegible]



» [Arcade] In [illegible] is the Mission 1 boss, but here he doesn't appear until Mission 2, as a more powerful mid-boss [illegible] kamikaze tanks.

1999

METAL SLUG X (ARCADE, NEO-GEO, PLAYSTATION)

It might only be a toughened-up remix of *Metal Slug 2* – a new colour scheme, a few different enemies and bosses, and a handful of new weapons were pretty much all that differentiated *MSX* from *MS2* – churned out quickly to squeeze more money out of gullible fans, but for discerning *Slug* aficionados this game was the series' high point for a long time, especially as far as home gamers were concerned.

Interestingly, *Metal Slug X* didn't get a Neo-Geo CD release, and it would be two years before players would have the chance to tackle *MSX*'s Combat School, and more besides. The 2001 PS port of *MSX* includes the usual Combat School with its Pin Point and Survival games, but it also gets Another Mission, an all-new mode in the vein of Another Story, but this time featuring around 20 mini-games. In these you again have to play *Metal Slug* in very unfamiliar ways, often in new scenery not present in the main game and often involving being unarmed.

You might have to climb to the top of the stone tower from Mission 2 against the clock, or guard a baby from alien attack as it crawls from one end of a single screen to the other, or leap from missile to missile to reach the end of a short scrolling stage. (There are also more traditional challenges, like shooting down attacking fighters from a tank or with the heavy machine gun.)

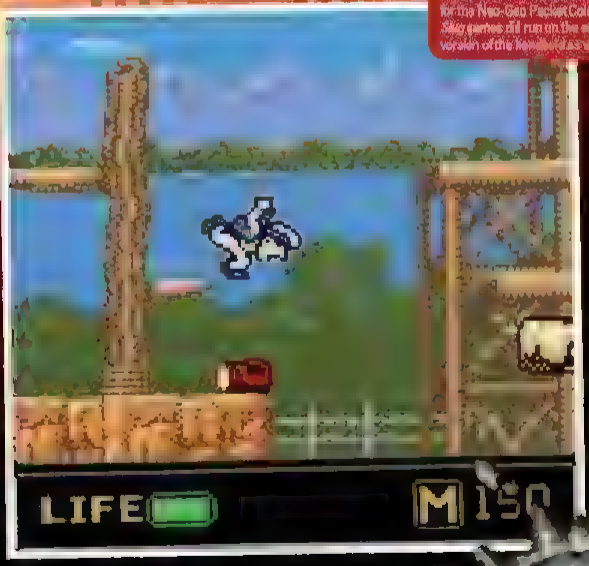
Getting very challenging as you progress through it, Another Mission is practically a whole game by itself, and allied to a good core game and the other two modes makes PS *Metal Slug X* a hefty package.

1999

METAL SLUG: 1ST MISSION (NEO-GEO POCKET)

Initially it's hard to look at *Metal Slug: 1st Mission* with anything but disappointment. Despite running on dedicated SNK hardware – the cute but short-lived Neo-Geo Pocket – the visuals are sparse and crude, and the handheld's two-button controls meant that you had to manually toggle between firing your guns and throwing grenades with an ungainly lurch at the Start button. But once you forgive it for not really being *Metal Slug, 1st Mission* quickly shows itself to be a cute and inventive little platform shooter.

The best change is that there are 16 missions to battle through, most of them just as long as a typical coin-op stage. Other significant differences are that you have an energy bar instead of one-hit lives, and your goal is simply getting to the end, with no scores tallied. (You do get saves and continues, luckily.) There are lots of cute touches, like being captured and having to escape from a prison camp, or ejecting from your plane when it gets shot down and having to play a parachute mini-mission, and the game is fresh and likeable all the way through.



» [Neo-Geo Pocket Color] Although written for the Neo-Geo Pocket Color, the NGP *Slug* games did run on the earlier [illegible] version of the [illegible]

THE DEFINITIVE METAL SLUG

2000
METAL SLUG: 2ND MISSION (NEO-GEO POCKET)

While it looks pretty similar, the second NGP *Metal Slug* is a very different game to the first. Its 38 missions are generally a lot shorter, yet less linear – often you'll finish a level without ever really knowing what you were supposed to be doing in it, and even more so than in *1st Mission* you get flung from tank to plane to jetpack to on foot with dizzying speed. On the upside, the controls have been improved a lot with a dedicated grenade button and the graphics are a lot bigger and more detailed. In general, though, *2nd Mission* steps just too far away from the *Metal Slug* template, and the loss of focus makes it less enjoyable than its older brother.

» [Neo-Geo Pocket Color] A welcome return for the classic bomb-dropping.

2000
METAL SLUG 3 (ARCADE, NEO-GEO, PS2, XBOX)

As any keen student of philosophy knows, there's supposedly an ancient Chinese proverb that runs. "Most people are fat-headed cretins without enough brains for even one good sandwich", and it's never better illustrated than when people say *Metal Slug 3* is as good as the series got. *Metal Slug 3* isn't even as good as the Black Death got. (Hey! I love this game – Ed)

Setting the scene with a tedious and baffling opening mission that pits the player not against enemy soldiers but what appear to be armed squid – Why? It's anyone's guess – and culminating in one of the most epically hateful first-level bosses in recorded videogame history, *Metal Slug 3* itself is a joyless chore from its incomprehensible beginning to the end of the nine hours-long final stage and frankly doesn't deserve any more words wasted on it in the short space we've got.

The bonus games for the home releases of *MS3* were very different to most of the other titles in the series. There was no Combat School, and no Survival mode – instead, you got two standalone mini-games. Fat Island is (ironically) a slim little platforming effort taking place on five single-screen missions where the object is to stuff your face with food in various ways (your score is measured by your weight in kilograms). It's lots of frantic fun, and over in less than five minutes win or lose, but inexplicably is the only mode in the game not to store a high score, instantly destroying most of the point in a staggering outbreak of utter stupidity.

Storm The Mothership is more substantial and less interesting, casting you as one of General Morden's goons tasked with rescuing the evil warlord from the double-crossing aliens. You can play as one of three different soldiers (armed with either grenades, bazooka or shield and pistol), and lead a whole squad of CPU-controlled troopers in the attack on the alien base. Unfortunately, there are so many characters on screen that death is pretty arbitrary and it's rarely possible to see what killed you, and it's so hard to get into even the lowest reaches of the preset high score table that the mode isn't nearly as much fun as it could have been.

» Maybe the worst Level 1 boss of all time.

[Arcade] *MS4* tries to up the pace by giving you an almost non-stop barrage of vehicles to ride in for the first couple of levels, but soon reverts to a slow, painstaking slog.

2002

METAL SLUG 4 (ARCADE, NEO-GEO, PS2, XBOX)

By the time the fourth release in the main *Slug* line arrived, SNK had gone down the dumper and remained only as a brand name. Playmore handled the new release, and came up with a game that was a bit less tedious than its predecessor without being very different, save for a quickly abandoned medal-collecting sub-theme. Its main purpose was still to hoover continue-money out of arcadegoer's pockets, but it was slightly less bitterly unfair than *MS3*, as well as being shorter. (And smaller generally, with less branching and therefore less replay value, which would normally be a bad thing but isn't when you're using something as horrible as *Metal Slug 3* for your design foundation.)

Joy sucking zombie sections were still everywhere, though, and to date *MS4* remains the most criticised game of the series. (This reporter has a theory about how popular reaction is always a game behind when it comes to long-running franchises – because when players buy something that got good reviews but turns out to be a bad game, they take their frustrations out on the next one in the series – but we don't really have the room to go into it.)

The home versions were punted out in a hurry at budget price, and have no extras whatsoever, not even Combat School.

2003

METAL SLUG 5 (ARCADE, NEO-GEO, PS2, XBOX, PC)

Having cut its teeth on *Metal Slug 4*, the following year's game saw Playmore get into its stride a bit. *Metal Slug 5* is a significantly better game – faster and leaner and fairer – but most importantly of all it's *completely zombie-free*! Yay! Apart from that long-overdue fix it's business as usual, so let's save ourselves some time.

[Xbox] As with *Metal Slug 4*, the home versions of *MS5* were bargain-basement budget releases with no extras, so none are pictured in this screenshot.

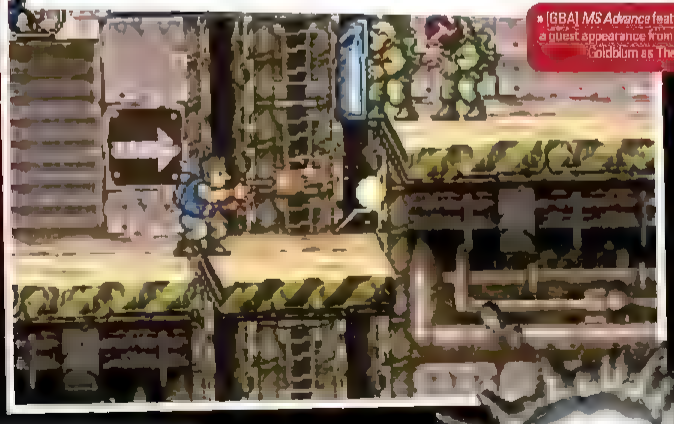
2004

METAL SLUG ADVANCE (GAME BOY ADVANCE)

In most respects, *Metal Slug Advance* is the most radical and inventive of all the *Slug* games. Designed very much with its target platform in mind, it's superficially similar to its predecessors but in fact has very different structure and goals. The most obvious deviations from the *Metal Slug* norm are both borrowed from the Neo-Geo Pocket games – that is, an energy bar instead of lives, and there's no scoring.

But, in fact, the underlying game mechanic of *Advance* is a lot closer to Pokémon than *Metal Slug* – rather than simply slaughtering your way to the end, the focus of *Metal Slug Advance* is on prisoner rescuing, and you'll have to play stages over and over again (you can select any one you've cleared) until you can get to the end of them without being killed, thereby saving any prisoners you freed on that particular runthrough and recording them in your Pokedex style card album.

The ferocious difficulty, exacerbated by an irritatingly excessive amount of enemy respawning, will be an issue for a lot of players, but if you've got hardcore Slugging skillz you're going to love this. And if you're a cack-handed wuss you'll still have some fun just continuing your way to the end without worrying about collecting any cards. This is a great little game, one of the series' high points and well worthy of some attention.



[GBA] *MS Advance* features a guest appearance from Joe Goldblum as The Fly.

THE DEFINITIVE METAL SLUG

2006
METAL SLUG AKA METAL SLUG 3D (PLAYSTATION 2)

Here, on the other hand, is the black sheep of the family – a game just as different to the main *Slug* bloodline as *Advance* is, but for entirely different reasons. Completing some sort of ironic circle, the series that started out as a refreshing antidote to generic polygon games has now turned into one itself.

Metal Slug 3D is a respectable enough little game, and does a fair job of translating the trademark clear small-sections-and-move-on *Metal Slug* gameplay from 2D into third-person 3D (including the reliance on making you shoot armoured vehicles hundreds of times with a uselessly weak handgun) but there are already a hundred PS2 games doing the same thing better than this by-the-numbers effort with its major camera issues and fiddly controls. It plays like an internal design experiment that didn't quite work, but that it figured it might as well sell anyway. You won't hate it if you buy it, but don't hold your breath for *Metal Slug 3D 2*.

2006
METAL SLUG 6 (ARCADE, PS2)

The sixth game in the series properly marked a considerable evolution. The near-20-year-old Neo-Geo hardware was finally dumped in favour of Sammy's Atomiswave platform, putting an end to slowdown issues, and the gameplay design also saw some significant changes. The six selectable characters now play differently (Fio, for example, gets more ammo for weapon pick-ups than the others, whereas Eri gets extra grenades), and there's a *Contra*-style double weapon system, where you can switch between two different pick-ups or even stick with your crappy default pistol to conserve ammo until you need it. There's a new melee attack, a combo-power-up mechanic, and the gold coins first seen fleetingly in *Metal Slug 2* now form the heart of the scoring system.

With all that in place, *Metal Slug 6* initially looks like being a return to the all-action fun of the first game, with the expanded armoury doing away with the tiresome insistence of *Slugs 3* to *5* on keeping the player pitifully underpowered in the face of overwhelming assaults. Sadly, by halfway through Mission 2 that approach is back, and from Mission 3 onwards it's worse than it's ever been, leaving the poor player with a pathetic pop-gun with which to take down wave after wave of large, fast moving and heavily armoured enemies crowding the screen and spewing out cascades of fire from point blank range. (There's a half-hearted attempt at alleviating the misery by including an Easy mode, where you always have the heavy machine gun, but that only gets you past the first four levels.)

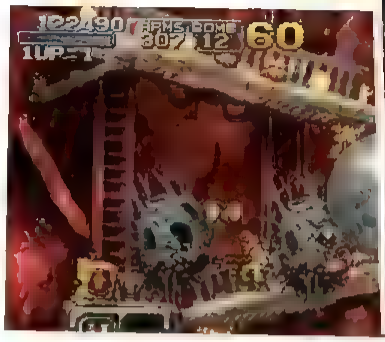
Metal Slug 6 is, in itself, a wholly wretched experience, but it did lay some important groundwork for the future, so hurry on.

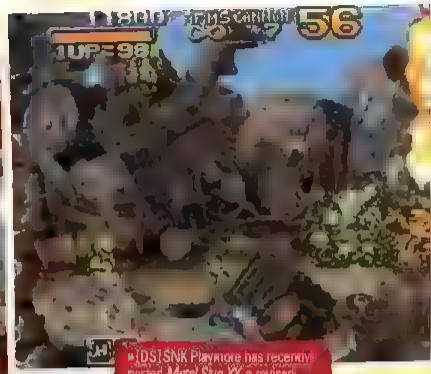
2006

METAL SLUG ANTHOLOGY (Wii, PS2, PSP)

This compilation of all seven arcade *Slugs* (*1* to *6* plus *X*) seemed like manna from heaven for *Metal Slug* fans when it was announced, but, in fact, it's a massive and stupid missed opportunity. It's literally the arcade games, so you get none of the extras from any of the home ports. The one worthwhile addition is the inclusion of a rapid-fire mode (particularly welcome on PSP, because hammering repeatedly on fire buttons on a handheld is a recipe for motion sickness), but for some insane reason it's enabled on every game *except Metal Slug 6*.

Anthology's also variously afflicted with a cumbersome front end, heavy loading issues and bad Wii controls – the Wiimote being one short of the three fire buttons needed, and resorting to making you jerk it around for jumping – and is generally a waste of money on all formats, which is why it's such a fixture of game-store bargain bins.





» [DS] SNK Playmore has recently ported *Metal Slug XX*, a revised version of *Metal Slug 7*, to both the PSP and Xbox Live Arcade.

» [PSP] *Metal Slug Anthology* seemed like just what fans of the series had been waiting for, but turned out to be a huge disappointment.

2008

METAL SLUG 7 (DS)

The latest Metal *Slug* is a sort of funny little hybrid. It takes everything that was good about *Metal Slug 6*, *Metal Slug Advance* and the PlayStation version of *Metal Slug X* and mixes them together to come up with the finest game in the history of the series. *Metal Slug 7* is a work of genius, built around the core of *MS6* (double weapons, combos, coins, six characters with different abilities), combining classic all-out *Slug* action and the best bits from the spin-offs, all inside a structure that's been perfectly designed for bite-sized chunks of home and handheld play.

MS7 is effectively three different types of *Slug* games in one. It's got *Advance*'s Pokémon-esque prisoner-collecting game, combined with traditional high-score tables for the main game (a separate one for each of three difficulty settings, all of which let you play all the stages), and rankings for the Combat School missions, which are now a blend of the old Combat Schools and *MSX*'s Another Mission, and number a whopping 80 in total.

Whether you just want to plough through to the end using lots of continues, get as far as you can on one credit, carefully explore for well-hidden prisoners or take on a bunch of mini-challenges, there's something different to do every time you load *Metal Slug 7* up. It's got weeks and weeks of replay value, even for hardcore *Slug* veterans. It strips the series down to its fundamental values, dumping all the rubbish, and then beefs the good bits all up to the max. After a decade of disappointments, it's almost as much of a breath of fresh air as the first game was all those years ago.

餓狼 GAROU MARK OF THE WOLVES

The ninth and (currently) final game in SNK's *Fatal Fury* franchise holds a special place in the hearts of many Neo Geo owners. *Garou: Mark Of The Wolves* is one of the finest 2D fighting games ever made, and marks a glorious apex for a developer well respected inside the beat-'em-up genre. Updating its *Fatal Fury* franchise by adding a healthy dollop of youth was certainly a risky move, but one that paid off. This issue Stuart Hunt lovingly boots up an SNK legend and pulls apart its brilliance one bout at a time.

T.O.P. System

The T.O.P. (Tactical Offence Position) bar is a great new addition to the series. Players can place the T.O.P. Bar at one of three points on their energy bar (front, middle or end). The system works by heightening the player's powers all the time their energy level sits within the area of the T.O.P. Bar.

Just Defend

The Just Defend technique might lack the brilliant sense of risk and reward of *Street Fighter III Third Strike*'s parry system, but it still proves a wonderful addition to *Garou*'s combat. If performed correctly, it awards players with a slight chunk of health and the chance to quickly perform a counter.

Super Moves

Garou has two tiers of Super Moves (and a few secret ones too). The two main ones are S-Power and P-Power. The S-Power allows characters to perform a weaker version of a Super Move, and the P-Power allows them to perform a powerful version of their Super Move.

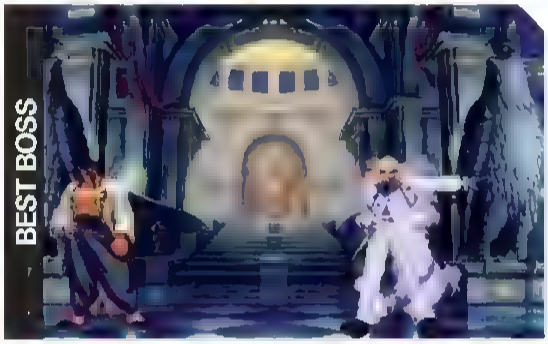
Break Moves

These allow characters to cancel out of a special move by pressing both A and B buttons at the very start of performing it, effectively feigning the attack. These prove a great way of confusing an opponent and punishing them royally with a devastating flurry of kicks and punches.

MEMORABLE MOMENTS

Balance, balance, balance

Shaking up the *Fatal Fury* franchise brilliantly, in *Garou* SNK dropped many of the fighters that had appeared in earlier *Fatal Fury* games (only Terry Bogard remains from the original line-up) but respectfully replaced them with students or offspring of previous fighters. As well as shaking up the character roster, SNK also tweaked *Fatal Fury*'s gameplay by dropping the awkward dual-plane system and adding all sorts of wonderful new mechanics to the series. If we had to put a finger on why *Garou* is such a classic, though, we'd point at the fact that it's the most balanced 2D fighting game in existence.



Kain R Heinlein

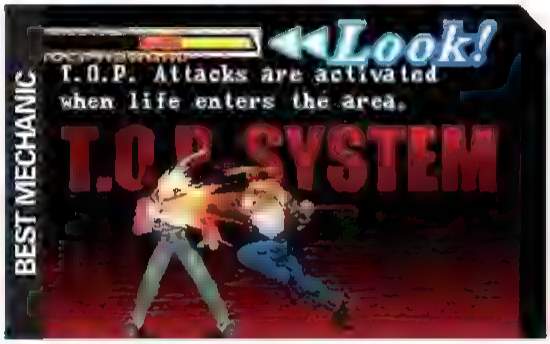
Set ten years after *Real Bout Fatal Fury*, *Garou*'s main story arc follows Terry's relationship with Geese's son, Rock. Following Geese's death, Terry adopts Rock and mentors him in the ways of Hakyokusaken martial arts. Meanwhile a new threat infects the streets of Southtown: Grant, a colossus of a man whose face is shrouded by a demon Halloween mask, and Rock's uncle, the pencil-suited Kain R Heinlein, who wishes to continue Geese's legacy. Heinlein is the better of the two bosses, but can only be fought by getting a AAA rank average during the game, or sneakily inputting a code.

Terry's Stage

All of the stages in *Garou* look utterly fantastic, and most of them are brimming with animation and colour – and all this impressiveness is chugging from a 19-year-old piece of hardware, remember! While we do have a real love for Rock's stage, if only for the fact that the background music is clearly a mix of the Robert Miles's track *Children*, we have to hand it to Terry, whose fights take place aloft a speeding train. With each round that passes, the backgrounds change - it's a great touch, and shows the effort and meticulous attention to detail that SNK put into the game.

Rock Howard

Garou's character roster of 14 is somewhat meagre when compared to other beat-'em-up games, but each character is wonderfully balanced, meticulously designed and animates beautifully – the game is incredibly slick in that department. While we do have a fondness for heavy-fringed sociopath Freeman, we'd probably have to hand this particular honour to Rock Howard. As well as being a great all-round fighter, Rock's move set is a mixture of his late father Geese Howard and Terry Bogard's fighting styles, making him a fitting legacy of the feud between Geese and the Bogard brothers.



T.O.P. System

Of the many new mechanics SNK introduced in *Garou*, the TOP System (or Tactical Offence Position, to give it its full title) deserves the most lip service. Before the first blood is drawn, players must place the TOP bar at any one of three points on their energy bar; when their energy level sits within this TOP Bar range during the fight, their powers are increased and a TOP Bar Special attack is unlocked. Players can also adjust the size of the TOP Bar; the smaller they make it, the greater damage it inflicts. The TOP Bar essentially throws each player a lifeline during the fight and adds a sense of strategy to the combat.

Its gameplay

While most Capcom brawlers opt to dazzling gamers with pyrotechnics, fireballs and the like, this can sometimes result in wizard-like dust-ups between both fighters as they throw projectiles from opposite ends of the screen. Most SNK brawlers, though, and *Garou* especially, opt for a more grounded approach to specials and attacks, allowing for more brutal and intense feeling fights. But really it's the sheer speed and fluidity at which *Garou*'s action ebbs and flows that proves the most vital ingredient to its overall quality; it allows for the combat to feel precise, and moves and controls to feel far more responsive and solid.

What the press said... ages ago

Gamespot 85%

"*Mark Of The Wolves* for the Dreamcast could be described as a doubly nostalgic game – it's a port of one of SNK's last great Neo-Geo games and is the last console port that SNK ever did. If you own a Dreamcast and have any interest at all in 2D fighting games, you owe it to yourself to pick up a copy of *Mark Of The Wolves*."

Defunct Games 79%

"*Mark Of The Wolves* is good, and highly recommended. Just be aware what you're getting yourself into before you blame us for being disappointed. It's not the best of the new technology, but then, it was never trying to be, and at least succeeds at that!"

What we think

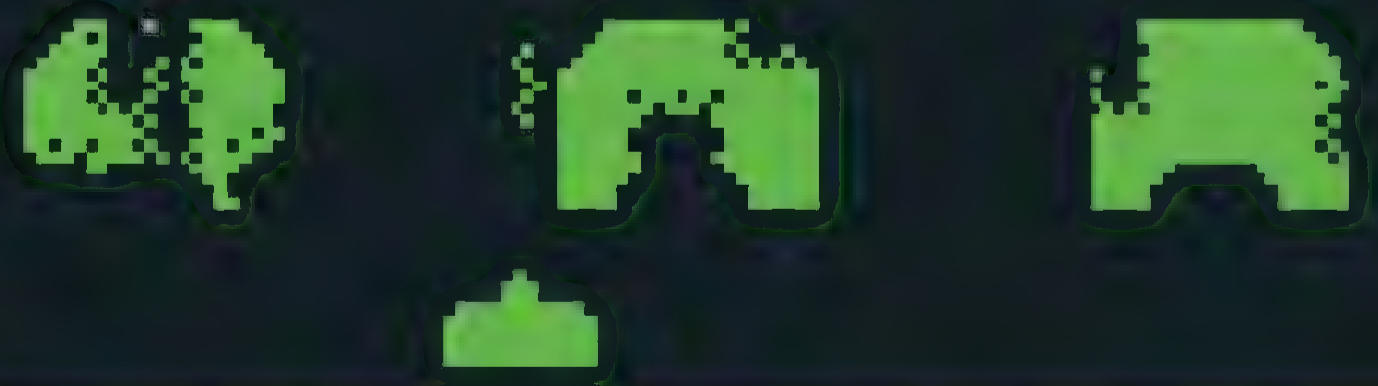
Nine years on and *Garou* is as enjoyable today as it was back when it was amazing Neo-Geo owners. Sure, its high asking price makes it a little prohibitive on the AES, but both the Dreamcast and PS2 ports offer fine conversions of the game.

IN THE KNOW

PLATFORM: NEO-GEO
DEVELOPER: SNK
PUBLISHER: SNK
RELEASED: 2000
GENRE: BEAT 'EM-UP
EXPECT TO PAY: AES £300, MVS £35, DC £30, PS2 £50

The Making Of...

Space Invaders



In a rare interview with Japan's godfather of videogames, **Jonti Davies** speaks with Tomohiro Nishikado about the birth of the game that triggered a revolution 30 years ago.

» Ex-Taito visionary, Tomohiro Nishikado.

For a man who single-handedly turned his country into a nation of videogame junkies, and without whom Shigeru Miyamoto claims he would not even have joined the game industry, Tomohiro Nishikado is a surprisingly unassuming and down-to-earth kind of chap. Since 1996 he's been running his own operation, a 22-strong development studio called Dreams, just down the road from Sega in Tokyo. It's a quiet and unnoticed developer that seems to be deliberately avoiding the limelight – the discography on Dreams' website is nothing more than a list of generic terms: 'Action game for PS2', 'Communication game for DS', and so on. So it's quite odd to think that 30 years ago, when in his tenth year at Taito, Nishikado alone produced a global phenomenon in the mesmerising and boldly innovative *Space Invaders*.

Let's head back to 1978. "At the time," says Nishikado, "the block destruction [*Block Kuzushi*] game *Breakout* was really popular in Japan, and I was hooked on it myself. I'd made a few games up until that point, but when I experienced *Breakout* it made me want to drive myself to develop a game that would surpass it." But where many developers would have been more than content to code a superior clone of *Breakout* with a few clever enhancements (which is precisely what another Taito designer, Akira Fujita, would do a decade later), Nishikado took a completely different stance as he sought to surpass the addictive 'bat, ball and block-breaking' system of Atari's 1976 classic. Thanks to his keen perceptive powers, Nishikado was able to see beneath the surface of *Breakout* and identify the mechanism that was causing him and so many other young Japanese to put their 100-yen coins in the slots of Atari's cabinets.

"For me," Nishikado elaborates, "the really interesting element of *Breakout* was the art of deciding on a number of targets and that sense of achievement you'd get from destroying a whole group of blocks simultaneously to clear the stage. I analysed the exhilaration players felt when playing *Breakout* like this, and I eventually decided to capitalise on this [gameplay design] by trying my hand at a shooting game where *Breakout*'s quadrilateral targets would be replaced with targets that had more interesting forms."

Had Taito's top man not told Nishikado to make changes to the design of his project, *Space Invaders* would have ended up with people taking the roles of those "interesting forms" Nishikado was looking for. "During the development process, I had the enemy targets set as humans," he reveals, "but Taito's then-president told me to stop using humans in such a way. I initially thought, 'Okay, if I substitute the humans with monster-like creatures, that should work out fine'. But then I saw a newspaper article saying that *Star Wars* had been extremely well received in America, so I decided on using space aliens instead of monsters. *Star Wars* had just hit the theatres in America and was about to be premiered in Japan, so there was a bit of a 'space boom' happening. And that's why I opted to make my game's targets aliens from outer space."

With that settled, Nishikado continued with his work as an independent entity within Taito, which is how he liked to operate in those days (even today, he seems to value autonomy: his Dreams outfit works with/for 20 or so Japanese soft cos, maintaining complete independence). Apart from

IN THE KNOW

» PUBLISHERS: TAITO

» DEVELOPER: TOMOHIRO NISHIKADO

» RELEASED: 1978

» GENRE: SHOOT-EM-UP

» EXPECT TO PAY: £500 FOR AN ORIGINAL CABINET, MUCH LESS FOR ANY OF THE CONSOLE/COMPUTER PORTS

The Making Of... SPACE INVADERS

"Star Wars had just hit the theatres in America and was about to be premiered in Japan, so there was a bit of a 'space boom' happening ... That's why I decided to make my game's targets aliens from outer space"

NISHIKADO REVEALS THAT GEORGE LUCAS'S WORK HAD AN EFFECT ON SPACE INVADERS, AS DID H.G WELLS AND MARINE LIFE

the cabinet design and some sound work, *Space Invaders* was exclusively Nishikado's baby: "I let a new employee work on the sound source and produce *Space Invaders*' audio effects, but apart from that, all of the other work – namely the planning, the design, graphics design, coding the software, building the hardware – I did entirely by myself." He managed to turn the game around in remarkably quick time, especially given how his first job was the daunting task of producing his own development tools specifically for this project: "From the initial conception of the idea right through to the completion of the game," Nishikado confirms, "*Space Invaders* took me approximately 12 months to produce." That was the year that was.

Having joined Taito with a degree in Engineering from the electrical engineering-focused Tokyo Denki University, Nishikado was apparently seen within the company as something of a go-to man for any hardware-related tasks. His first three games for Taito – 1970's *Skyfighter* and its sequel the following year, and 1972's *Borderline* – were all mechanically operated creations; games without screens. Nishikado's great skill was to improvise with existing materials and create something that was entertaining and challenging. With *Space Invaders*, however, he realised that his new project was too ambitious for the technology and software he had to hand – new tools would be required, and who better to produce them than the engineer-programmer himself?

"There really was no microcomputer hardware in Japan during the late 1970s," Nishikado laments, "so I used American hardware [including the Intel 8080 CPU] as a reference point and then took it upon myself to remodel it. Also, there was no game development environment to speak of, so I began to create my own development tools from scratch. I drew up a rough specification document and started programming while consulting that paper, but I was thinking about the efficiency of the tools I was making more than anything else, which complicated things. Because of that, I would create and program an original development tool and then realise that I'd soon need another tool as well, so I'd build that from scratch next... In the end, this process took up about half of *Space Invaders*' entire development period."

Those six months of preparatory work were, of course, quite worthwhile. The limitations of 1978 vintage hardware and memory capacities caused Nishikado no end of headaches, though. As he worked towards realising his *Star Wars*-inspired dreams of a game to tap into the space boom, he was also faced with the realisation that capacity and power were at a strict premium. Still, Nishikado accepted that he had to work with what was available, reconfiguring and reworking until he had the tools and hardware required to get the *Space Invaders* he could see in his mind's eye onto a monitor. Ever the innovator, he quickly moved on from the most primitive of methodologies to something altogether more forward thinking: "At first," Nishikado says, "I drew a plan for the screen layout on paper and then put that up on the screen, but if I wasn't happy with it because it didn't look good, I would have to start drawing a new frame action and put that up as a replacement, and so on. That was the process I was using – I really wasn't able to

» *Space Invaders* spawned many copycat games, but far from irritating Nishikado, he takes an "imitation is the greatest form of flattery' approach"

» (Arcade) The 'Nagoya shot' technique in action: finding invulnerability as the invaders encroach was just one of the tricks discovered by Japan's fanatical players of the game in 1978.

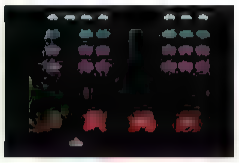
draw any good results that way, though. So in view of that, I created something that these days we take for granted: paint tools, whereby I could use a light pen to easily make corrections to the graphics. This enabled me to complete the graphics with ease and in relative comfort. I think that, at the time, this was a groundbreaking development tool."

Thanks to his inventive time-saving measures, Nishikado was able to work with greater efficiency once the groundwork had been done and his development environment had been established. And as his processes became smoother and less jarring, it became much easier for him to express influences other than *Star Wars*. In particular, the enemy forms in *Space Invaders* began to take on new subtleties and idiosyncrasies. Nishikado explains: "I took the octopus-like aliens from H.G. Wells's *War of the Worlds* as a starting point, to influence the design of the biggest enemy targets in the game. For the targets in the middle of the screen, I modelled them on the image of a crab, and for the uppermost enemies I was thinking of squids. I was imagining the enemies as marine life. The aliens' movement was basic because of the low memory capacity I had to work with, which meant I could only program two patterns [of movement]. But I felt that in some ways, simple was best."

It's probably just as well that Nishikado was content (to a point) with simple design, because the specs of the *Space Invaders* hardware would allow nothing greater. Getting the hardware properly and advantageously configured was in itself a great and time-consuming challenge: "For the base CPU board, I remodelled an existing game board," Nishikado recalls. "I replaced the ROM section with RAM and then developed Monitor ROM. This enabled 16 blocks of data to be input using the keyboard, which meant it was possible to use the keyboard to execute programs. I made various functions and features in the Monitor ROM, including an option that would let me save any programs I made to cassette tape. Of course, I also included a function so that I could produce graphics while looking at the monitor. I used the one kilobyte of static RAM available at the time to compose 64 units of eight kilobytes each lined up for

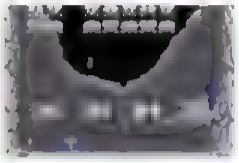
» (Arcade) The population of Japan took the title screen's encouragement to 'Insert Coins' to excess, children and adults alike.

Space Invaders Twelve



SPACE INVADERS PART II (Arcade, 1979)

Tomohiro Nishikado's first direct sequel to *Space Invaders* was, he admits, not as big a hit as the original. Still, it had some interesting features, including increased complexity to the movement of its enemy targets.



RETURN OF THE INVADERS (Arcade, 1985)

Although Nishikado was no longer at the helm, Taito went ahead with a jazzed-up *Invaders* sequel in 1985. *Return of the Invaders* again increased the variety of invaders' movement patterns, as well as brightening things up.

MAJESTIC TWELVE: THE SPACE INVADERS PART IV (Arcade, 1990)

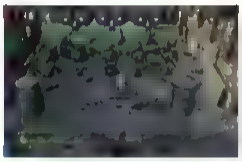
Known as *Super Space Invaders '91* outside of Japan, this introduced scrolling backgrounds, shields and power-ups. It also featured a series of stages in which you needed to protect cattle from UFOs.

SPACE INVADERS DX (Arcade, 1993)

Featuring a traditional Space Invader Mode, a two player split-screen Battle Mode and a Parody Mode, *Space Invaders DX* was an experimental game whose best features would be better developed in *Space Invaders '95/Akkanbeder*.

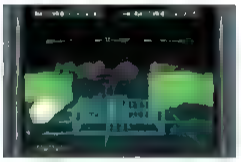
ARKANBEDER / SPACE INVADERS '95 (Arcade, 1995)

This great *Space Invaders* parody took a pun to arrive at its title 'akkanbe' is what kids say as they pull one eyelid down and stick their tongue out to make a funny face at another kid, a teacher or a parent.



SPACE INVADERS / SPACE INVADERS: INVASION DAY (PS2, 2002)

This Sammy-developed *Space Invaders* spin-off brought the series into *Earth Defense Force* territory, arming a few heroes with big guns and telling them to kill Invaders who have already landed on Earth.



SPACE INVADERS ANNIVERSARY (PS2, 2003)

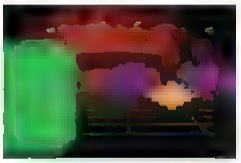
Notable for including an original 3D Mode, *Space Invaders Anniversary* was an unremarkable collection of variations of *Space Invaders* and *Part II*. The PSP attempt would prove much more worthwhile.

SPACE INVADERS POCKET (PSP, 2005)

This neat compilation contains four variations of the original *Space Invaders* (namely black and white, colour, cellophane colour effect and upright cab styles) as well as *Part II*, *Return*, *Majestic Twelve* and *Akkanbeder*.

SPACE INVADERS REVOLUTION (DS, 2005)

Nishikado himself developed *Revolution*, using the opportunity to incorporate touch-screen controls (digital controls remain far superior), 13 invader types and a variety of new power-ups and settings.



3D SPACE INVADERS (Mobile, 2006)

Providing the option to turn *Space Invaders* into a first-person shooter of sorts, the Taito developed *3D Space Invaders* is surprisingly ambitious given that it is a game you can play on your mobile phone. Defending on the go!

SPACE INVADERS EXTREME (DS/PSP/XBLA, 2007)

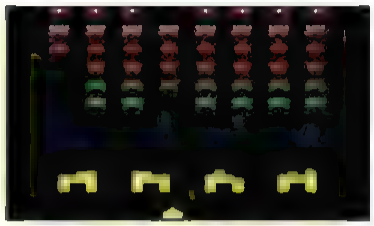
Arguably the best *Space Invaders* sequel, *Extreme* is probably what Nishikado has in mind when he says: "I think that shooting games have become too difficult and too centred on catering to enthusiasts."

SPACE INVADERS GET EVEN (Wii, 2008)

This recently released WiiWare exclusive turns the *Space Invaders* principle upside-down by putting the player in control of the Invaders, with the objective being to complete a successful invasion of Earth.

Attack of the Clones

How many times will we get away with using variations on the same pun?

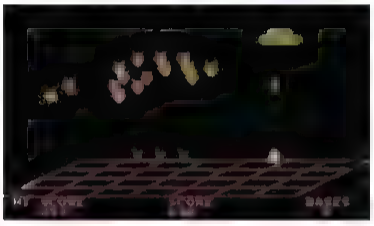


INVADERS (BBC MICRO, 1982)

IJK Software's *Invaders* was one of the earliest computer format clones of Taito's international hit. Monochrome and colour versions were released (the latter only for Model B computers).

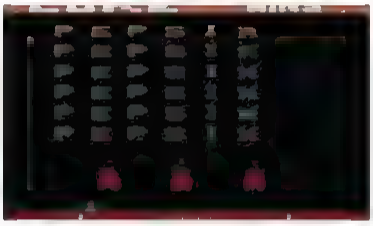
AVENGER (C64, 1982)

Another early attempt at bringing *Space Invaders* home was Commodore's *Avenger*, which managed to reproduce the coin-op's formula with only a minimum of cuts and compromises.



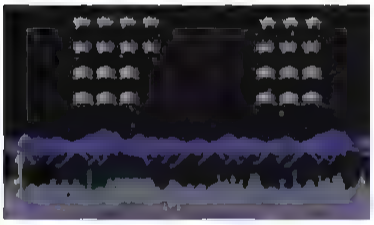
3D INVADERS (CPC, 1984)

More 'quasi-isometric' than three-dimensional, this effort at replicating/improving the original *Space Invaders* formula really struggles to imitate the playability of Nishikado's game.



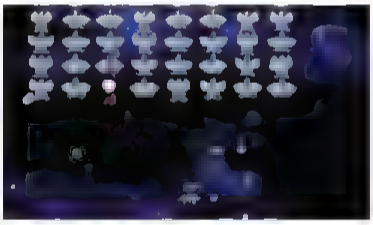
PEPSI INVADERS (ATARI 2600, 1993)

This limited-run promotional 'advergame', commissioned as you might guess by Coca-Cola, replaces *Space Invaders*' alien enemies with the letters P, E, P, S and I. Very clever, that.



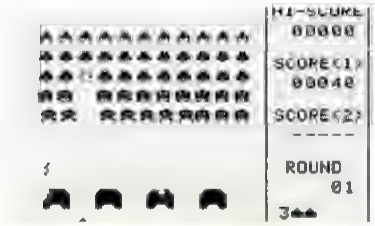
SPACE INVADERS: FUKKATSU NO HI (PC ENGINE, 1990)

This great PC Engine conversion also includes a 'New Version' of the game, where the protective bases are removed as your ship gains the assistance of a shield.



CHICKEN INVADERS (PC, 1999)

Chicken Invaders is a 1999 vintage poultry-based clone of *Space Invaders*, complete with eggs and drumsticks instead of laser fire. As it's freeware, you might like to give this game a shot. Don't be a chicken, etc.



SPACE INVADERS (WONDERSWAN, 1999)

This port of *Space Invaders* for Bandai's WonderSwan handheld replicates Nishikado's original work, only inverted as black sprites on a clear background.

SWEET INVADERS (MOBILE, 2006)

In one of the least imaginative and most shameful conversions of *Space Invaders*, 2006's *Sweet Invaders* 'innovates' by displaying bitty 'stunners' in the background of its 'erotic' take on the game.

the program area, but the performance was very bad and I remember occasions when data would become corrupt because of static noise. Nowadays, developers have gigabytes of memory to work with, but at the time I only had kilobytes..."

In spite of those trying limitations, Nishikado must have realised that he had a hit on his hands when groups of Taito employees began gathering at his desk for a go on the prototype version. "Once the game was close to being finished, quite a few people from [Taito's] development division were so pleased with it they began to play it regularly," he smiles. "However, because they were playing *Space Invaders* using my development tools, I wasn't able to get any work done while they were playing, which bothered me a lot. Having said that, although I developed *Space Invaders* alone, I think that in the end it was improved and perfected thanks to consultation with the people who were playing the game around me."

While the floor-level workers at Taito were rightly impressed with *Space Invaders* and were the first people in the world to become hooked on it, the 'Suits' were, according to Nishikado, a picture of doubt and scepticism: "In those days I was given complete freedom to work on games as I saw fit, so at the start of the project no one expressed any opposition to the idea. Along the way, though, I had to explain – mostly to businesspeople and salespersons – the game's shooting system and how there was nothing else to compare it with at that point. I had to outline how being invaded by these aliens would result in a game over, how enemies would shoot at the player and so on. That was difficult; they generally didn't give *Space Invaders* a good evaluation – they didn't seem to rate it very highly."

Part of the execs and salespersons' problem with the game was that it did something unusual; something they either couldn't comprehend or simply didn't see as an appealing factor in a project they were backing: "Up until *Space Invaders*, shooting games didn't feature enemies that would attack the player," Nishikado explains. But that wasn't the only feature that met with doubting voices: "Also, even if you still had missiles remaining, if the Invaders got to the bottom of the screen and successfully carried out their invasion, it would result in a game over. To tell you the truth, both of these features were vehemently opposed by the sales and businesspeople..."

The final build of *Space Invaders* satisfied its creator to an extent, but Nishikado had some regrets even as soon as the game was in the wilds of Japan's 'game centres' (the places we'd call arcades). "The capabilities of the *Space Invaders* arcade hardware were really low," Nishikado sighs. "I wanted to produce colourful images, but it just wasn't possible with that hardware – so as soon as the game was complete, I began to develop a plan for new high-level hardware." Initially, that wasn't possible, so the game appeared in monochrome form. Eventually, Taito came up with an ingenious solution that went some way towards placating Nishikado's desire for a colourful game: multicoloured cellophane screen overlays were placed over the displays of existing cabinets. Over in the States, Bally/Midway would pull the same trick with its upright cabinet.

While *Space Invaders* was by no means a rushed job – in spite of completing work on the game in just 12 months, Nishikado was not working to a set deadline as such – the limitations of the technology at his disposal meant the final build was not quite where he wanted it to be: "For one thing," says Nishikado, "I really wanted to include a feature in the original *Space Invaders* where the Invaders would split up and form groups... but at least this ended up appearing in *Space Invaders Part II*."

If Nishikado was slightly unimpressed by his own production, the same could not be said of Japan's population at large.

» [Arcade] *Space Invaders*' clear outline of its high-score system ensured that players would try to play cleverly and keep on returning.

"Businesspeople and salespersons ... generally didn't give Space Invaders a good evaluation – they didn't seem to rate it very highly"

THE SUITS COULDN'T SEE A GLOBAL HIT EVEN IF TOMOHIRO NISHIKADO DEMONSTRATED AND EXPLAINED IT TO THEM

» [Arcade] Tomohiro Nishikado's work remains relevant 30 years on from its conception, marking the game out to be, what we already know, one of the greatest ever to grace our planet.

DEVELOPER HIGHLIGHTS

» SPEED RACE DX
SYSTEM: ARCADE
YEAR: 1975

» SPACE INVADERS PART II
(PICTURED)
SYSTEM: ARCADE
YEAR: 1979

» LUNAR RESCUE
SYSTEM: ARCADE
YEAR: 1979

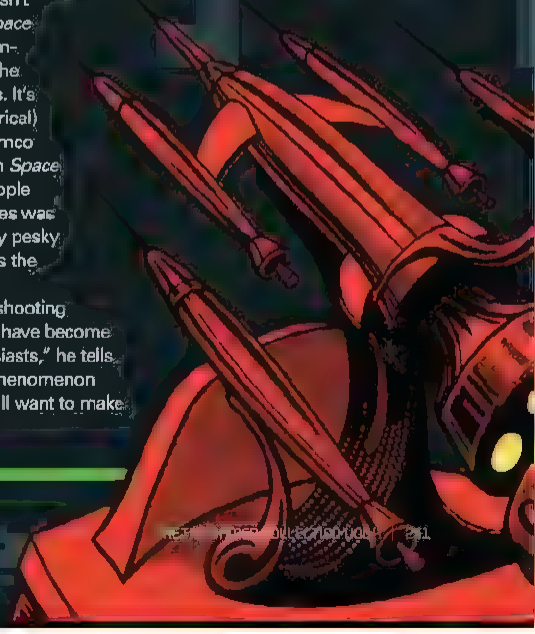
Tapping into the tremendous local interest in science fiction, *Space Invaders* was very much of its time – a 1978 vintage game for the inhabitants of Japan in 1978. The coin-op was an instant hit, zapping games right into the core of Japanese culture and even reportedly causing a shortage of 100-yen coins as a by-product of its phenomenal success. When we mention this myth/legend to Nishikado, he seems like he wants to laugh it off as a fanciful exaggeration, but it definitely holds an element of truth, as he concedes: "The effect of *Space Invaders* was certainly noted among businesses using 100-yen coins a lot, but I don't know whether the coins actually became less common because of the game..."

Nishikado can't take credit for the housing of his PCB, mind, as he had nothing to do with the coin-op cabinet's design: "The cabinet was designed and produced by a separate team," he says. Like the Western versions of *Space Invaders* manufactured by Bally/Midway, Taito's Japanese *Space Invaders* cabinets were eventually presented in different flavours – some upright machines, some in a cocktail-table style. After some comparison work, Taito's preference was for the table format, as Nishikado relates: "Originally, the cabinet was intended as an upright design. The table-type cabinet saved a lot of space, though, so that version ended up supplanting the upright model." *T.T. Space Invaders*, as it was dubbed by Taito in Japan, was a sensationally popular machine. Later on, however, Taito would release an upgraded version of the upright, which would ultimately prove to have a longer life in Japan's quickly changing game centres. The later addition of proper colour graphics (a notable improvement on the 'black-and-white graphics with colour overlay' solution) cemented *Space Invaders*' place as a 'safe bet' in bars, game centres and other locations.

The legacy left by *Space Invaders* is so immense and multi-branched that it's almost impossible to quantify the game's influence on the world. It has appeared in countless TV shows, either by way of a passing reference or as a central theme; it has provided the impetus for numerous musical projects (search Google Images for the sleeve to 1981 dub LP *Scientist Meets the Space Invaders*); it has even inspired artistic movements. Yet in Japan, the game itself was – like most trends here, it has to be said – a relatively short-lived phenomenon. On the one hand, Nishikado reckons: "Sales of *Space Invaders* were really much higher than I had anticipated." But on the other, matter of factly, he tells us: "The following year, once sales of the game had started to decline, I was asked to produce *Part II*, which I developed dutifully, but it wasn't such a big hit [as the original]."

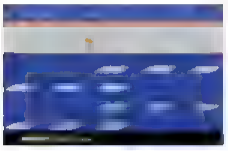
1978 was a hugely significant year for Taito and games in Japan in general, but in terms of the volume of notable games, it would be superseded year on year thereafter. As early as 1979, Nishikado was seeing his compatriots gaining ground, even if much of the basis for their successes had been laid by *Space Invaders* and what Japan collectively termed the 'invader game' boom: "When I saw how smooth the movement was in Namco's *Galaxian* – and how colourful it was, too – I remember thinking *Space Invaders* had lost [the battle]. There were many shooting games that used *Space Invaders* as a basis after that," Nishikado concludes, although he doesn't sound at all bitter about that situation. Without *Space Invaders*, there's a chance that Japanese shoot-'em-ups would not have developed, or at least not in the amazing way they did during the 1980s and 1990s. It's not merely Taito that owes Nishikado a (metaphorical) debt, but also the other Japanese developers (Namco with *Galaxian* included) who took inspiration from *Space Invaders* and, on a global scale, the millions of people whose first experience of the power of videogames was the heroic act of saving the Earth from invasion by pesky aliens who were wont to scuttle their way towards the planet's surface.

Nishikado isn't keen on the latest examples of shooting games – "In recent years, I think that such games have become too difficult and too centred on catering to enthusiasts," he tells us – but he remains committed to the enduring phenomenon that began in his office at Taito in early 1978: "I still want to make simple shooting games," he smiles.



FROSTBITE

SO COOL IT'S HOT



- **PUBLISHER:** ACTIVISION
- **RELEASED:** 1983
- **GENRE:** PLATFORMER
- **FEATURED HARDWARE:** ATARI 2600
- **EXPECT TO PAY** £20+

HISTORY

If you've access to an Atari 2600, head to eBay, seek out a copy of Activision's *Frostbite*, and be prepared to be blown away by one of the greatest videogames to ever star an Eskimo.

The brainchild of Steve Cartwright who worked on a number of other 2600 titles including *Plaque Attack*, *Seaquest* and *Barnstorming*, *Frostbite* is a typically slick release from Activision that effortlessly combines elements of *Frogger* and *Q*bert* to create a genuinely engaging platformer that's as fun to play as it's fiendishly addictive.

Taking control of Frostbite Bailey all you're required to do is hop back and forth across the ice floes that periodically pass by. Jumping on a floe changes it to a different colour and adds a block to the igloo Bailey is building, once all four floes have changed colour, you restart the process until your new home is finally built.

Initially the only hazards Bailey has to worry about are low flying birds and his own jumps – landing in the icy water results in a lost life. But as the levels progress, you'll deal with crabs and a vicious polar bear that patrols the top part of the screen – and otherwise the only safe area in the game – chasing you off screen if you get too close to him. Add in fish that can be picked up for additional bonus points and *Frostbite* gets very addictive very quickly.

A simple score attack game at its heart – probably one of the reasons why I love it so – *Frostbite* constantly pushes you to better yourself, but never feels unfair when you get pushed off a floe for the third time in a row. It may lack the inventiveness of other Activision titles like *Ghostbusters*, *Pitfall!* Or *H.E.R.O* but it's nevertheless a wonderful little game that boasts tight controls, perfectly balanced gameplay and that constant 'just one more go' factor that so many other titles seem to lack. Track it down as soon as possible. You won't be disappointed.

Special trial offer

Enjoyed this book?

Exclusive offer for new

Try 3 issues for just £1*

* This offer entitles new UK direct debit subscribers to receive their first 3 issues for £1. After these issues, subscribers will then pay £21.00 every 6 issues. Subscribers can cancel this subscription at any time. New subscriptions will start from the next available issue. Offer code ZCGRET4 must be quoted to receive this special subscriptions price. Direct debit guarantee available on request. This offer will expire 30 June 2011.

** This is a US subscription offer. The USA issue rate is based on an annual subscription price of £50 for 13 issues which is equivalent to $80 at the time of writing compared with the newsstand price of $9.99 for 13 issues being $129.87. Your subscription will start from the next available issue. This offer expires 30 June 2011.

The only UK magazine dedicated to retro games

Unmissable interviews
Every issue is full of one-on-one exclusive interviews with the original developers

In-depth articles
Exhaustive guides dedicated to all of the greatest gaming franchises

Nostalgia overload
Get those nostalgia glands going thanks to excellent articles that cover the good old days

subscribers to...

retro GAMER

Try 3 issues for £1 in the UK*
or just $6.15 per issue in the USA**
(saving 38% off the newsstand price)

For amazing offers please visit
www.imaginesubs.co.uk/RET

Quote code ZCGRET4
Or telephone UK 0844 848 8412 overseas 01795 592 872

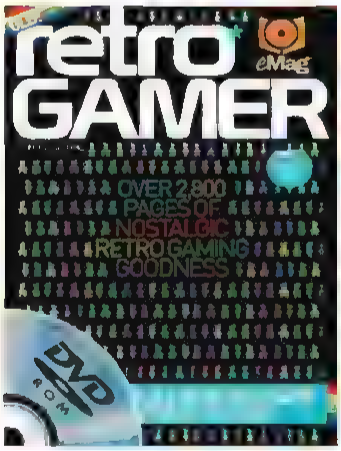
Remember wh gaming was gr

Fuel your retro passion with these classic books and DVDs

games™ Top 100 Videogames
Showcasing games that shaped a generation, this book features the greatest games for all consoles and PC platforms of all time.
SRP: £4.99

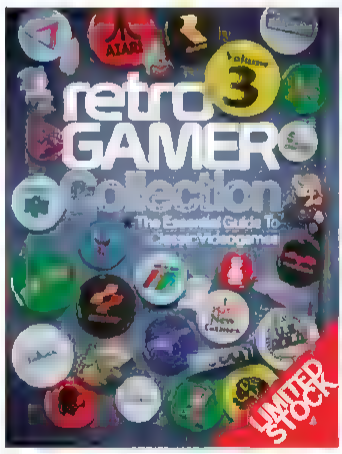
Videogames Hardware Handbook vol 1
The ultimate games machine collectors' manual, this 256-page guide to the greatest videogames hardware is a must buy.
SRP: £9.99

Retro Gamer DVD vol 1
The first 30 classic issues of **Retro Gamer** magazine on one interactive disc, featuring over 3,000 pages of hard-core retro gaming action.
SRP: £19.99



Retro Gamer DVD vol 2
25 classic issues of **Retro Gamer** on one interactive disc. Over 2,800 pages of retro gaming goodness packed with other FREE rare retro goodies.
SRP: £19.99

Retro Gamer Collection vol 2
The second anthology of **Retro Gamer** material is now better than ever, with the best articles from the ultimate retro guide.
SRP: £9.99



Retro Gamer Collection vol 3
The third anthology dedicated to the wonderful world of retro gaming. Hand-picked articles deliver the very best content.
SRP: £9.99

games™ DVD vol 1
Featuring a massive 7,500 pages of award-winning articles, this collection brings together the first 50 issues of **games™** magazine covering all gaming formats.
SRP: £19.99

en eat?

NEW!

Retro Volume 3

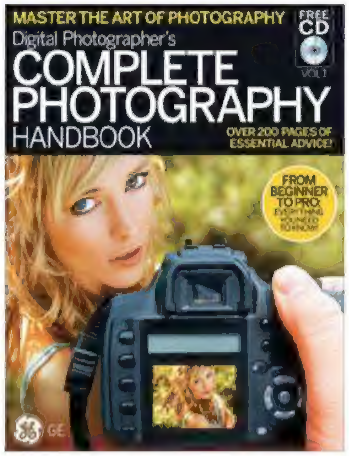
In this 256-page anthology, **games™** speaks to the developers of your favourite games and unearths fascinating stories from the industry's past.

SRP: £9.99

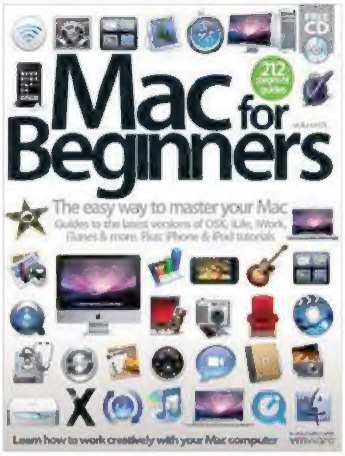
Prices may vary, stocks are limited and shipping prices vary depending on destination

Order online now at: www.imagineshop.co.uk

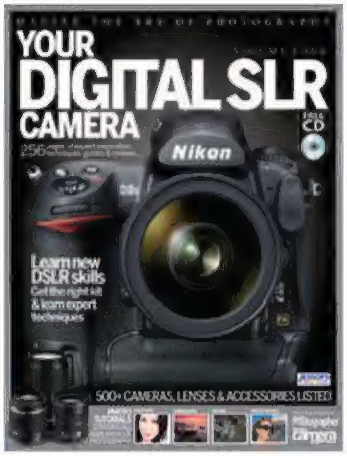
IMAGINE PUBLISHING



Complete Photography Handbook vol 1
Shooting ideas to practical tips, become a professional shooter, this tome is the only resource for digital photographers
SRP: £12.99



Mac for Beginners vol 1
Starting with the basics, this essential guide will teach you how to master all aspects of switching to Mac including OS X, Snow Leopard, Mail and Safari.
SRP: £12.99



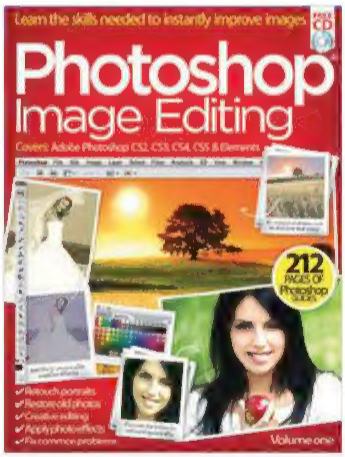
Your Digital SLR Camera vol 4
256 pages of DSLR advice. Master your SLR, learn shooting skills, fix your photos and expert advice on the best camera kit.
SRP: £12.99

iPhone App Directory vol 4
Your guide to the best applications for iPhone, iPad and iPod touch, with over 270 apps and games reviewed and every App Store category covered.
SRP: £9.99

The world's best creative bookazines to collect and keep or give as a gift

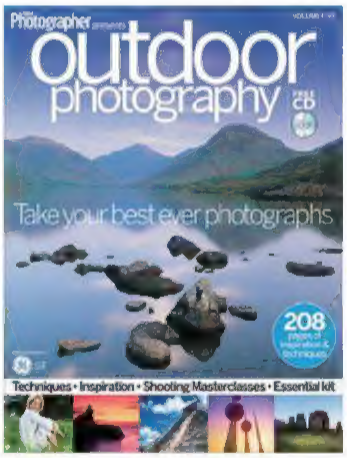
ip IMAGINE PUBLISHING

3D Art & Design vol 1
The essential companion for anyone into 3D and rendering. Covers all aspects and major programs with incredibly detailed tutorials and guides.
SRP: £12.99



Photoshop Image Editing vol 1
Improve your photos with this guide to image-editing skills, from cloning and colour correction through to restoring old photos.
SRP: £12.99

iPad& iPhone Tips, Tricks, Apps and Hacks vol 2
Get the most out of your iPad and iPhone with this fantastic bookazine detailing all you need to know. Slick, accessible – a must for all.
SRP: £9.99



Digital Photographer's Outdoor Photography
Beautifully crafted guidebook to getting the most from landscape and outdoor photography work including masterclass guides.
SRP: £12.99

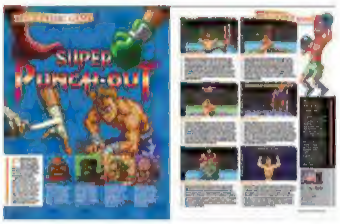
Order online www.imagineshop.co.uk

Prices may vary, stocks are limited and shipping prices vary depending on destination

The unmissable guide to classic gaming

MAKING-OF GUIDES

- The making of *Pac-Man*, *Space Invaders* and more
- The secrets to *Robotron* and *Cannon Fodder* unlocked



CLASSICS REVISITED

- The best 8 and 16-bit console games ever made
- Includes *Super Punchout*, *Mario Kart* and *Turtles In Time*

INSIDER INSIGHT

- Celebrating the industry's best ever developers
- Huge interviews with Hideo Kojima and many others

HARDWARE HEAVEN

- A complete guide to the history of the Amiga
- Revisiting the Mega CD, Game Boy and Atari ST

A magnificent collection of stunning features revisiting classic games and hardware

VOLUME 04
£9.99
ISBN 978-1-906078-66-9
IMAGINE PUBLISHING
9 781906 078669